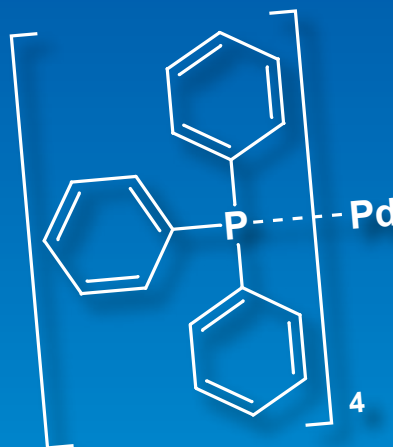
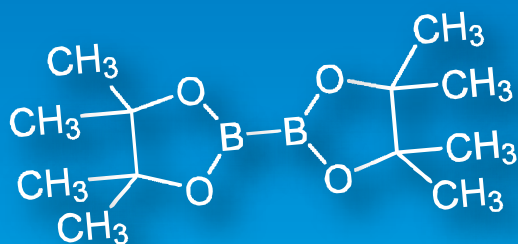
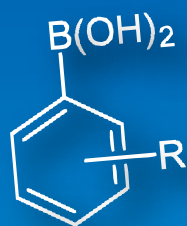


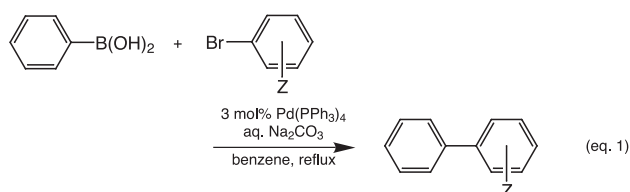
# Suzuki-Miyaura Cross Coupling Reaction



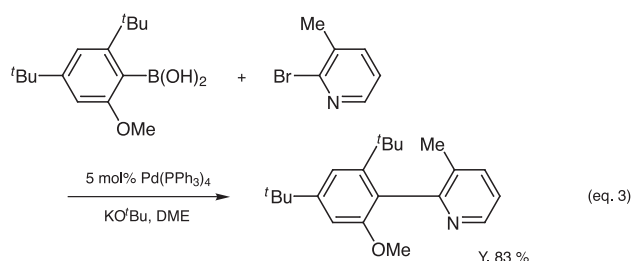
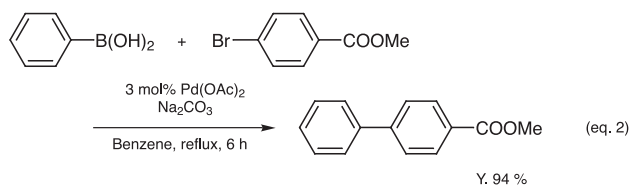
# Suzuki-Miyaura Cross Coupling Reaction

Biaryl compounds are utilized as important basic skeletons of functional materials such as liquid crystals and biologically active compounds. For example, the biphenyl skeleton of diflunisal demonstrates analgesic and anti-inflammatory effects, and 4-alkyl-4'-cyanobiphenyl is a liquid crystal material. Traditionally, the Ullmann reaction and the Gomberg-Bachmann-Hey reaction have been used for biaryl formation. However, the reaction selectivities and yields of the anticipated products were poor.

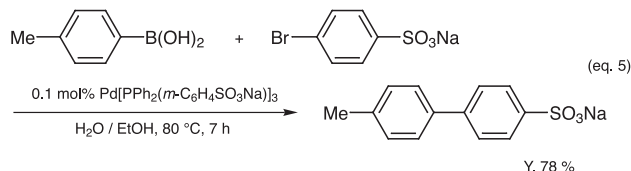
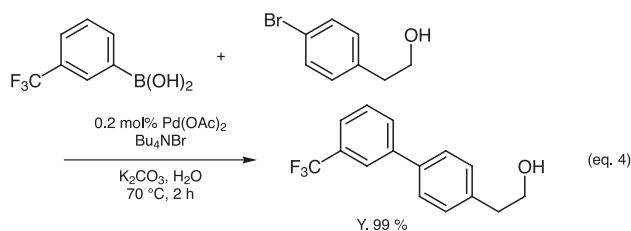
In 1981, Suzuki and Miyaura *et al.* made a breakthrough in the methodology of biaryl compound synthesis by using aryl boronic acids and aryl bromide under homogeneous palladium catalyzed conditions in the presence of bases (eq. 1).<sup>1)</sup>



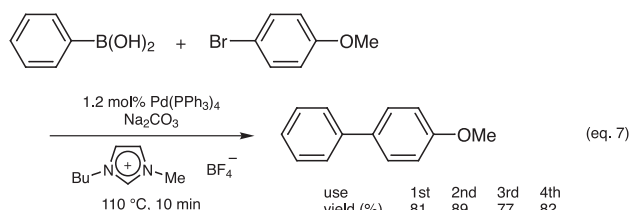
Under mild conditions, these reactions produce biaryl compounds with high selectivities and excellent yields. Moreover, there are few limitations in terms of functional group requirements, thus making it possible for the synthesis of biaryls with diverse components such as hydroxy, carboxyl and formyl groups, etc. (eq. 2). Furthermore, it is possible to synthesize sterically-hindered pyridylphenol derivatives (eq. 3).<sup>2)</sup> This useful reaction, the "Suzuki-Miyaura Cross Coupling Reaction" is named after its inventors, and it is an extremely useful reaction, although many improvements have been made since its discovery.



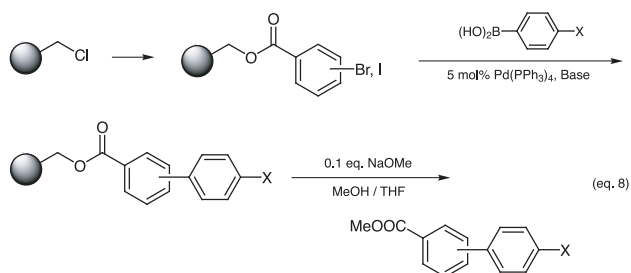
In recent years, many modifications in the "Suzuki-Miyaura Cross Coupling Reaction", such as using water as the solvent, have been made from Green Chemistry's viewpoint. For example,  $\text{ArB(OH)}_3 \cdot \text{Bu}_4\text{N}^+$ , generated when tetrabutyl-ammonium bromide and aryl boronic acid react in water, accelerates the cross-coupling reaction (eq. 4).<sup>3)</sup> The cross-coupling reactions using the water-soluble  $\text{Pd(0)}$  catalyst have also been reported (eq. 5).<sup>4)</sup>



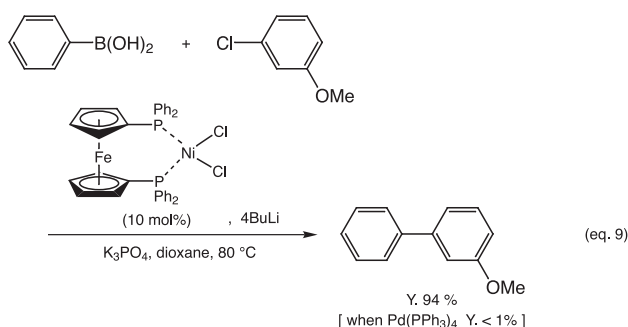
Experimental trials using ionic liquids as solvents have also been reported. According to reports, the products are easily extracted using organic solvents after the reaction, and the catalysts are held in ionic liquids. These ionic liquids and catalysts can be reused (eq. 7).<sup>5)</sup>



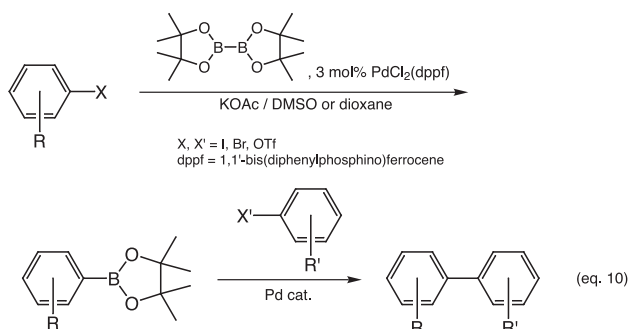
Since the first report of the Suzuki-Miyaura Cross Coupling Reaction, these have been many applications toward solid phase synthesis<sup>6)</sup> and other various syntheses. Aryl iodides and aryl bromides bound to Merrifield resin react with many different types of aryl boronic acids, and they produce biaryls in high yields (eq. 8).



The reactivities of aryl halides and aryl triflates are indicated as follows;  $\text{Ar-I} > \text{Ar-Br} > \text{Ar-OTf} \gg \text{Ar-Cl}$ . The oxidative addition of aryl chloride upon Pd is too slow. Therefore, in most cases it has been shown that the reaction itself does not proceed to completion, except in cases where aryls are heterocycles or possess electron-withdrawing groups. There have been some reports that biaryls can be produced in high yields from aryl chloride and aryl boronic acid when Ni catalyst is used instead of Pd catalyst (eq. 9).<sup>7)</sup>



Aryl boronic acids are typically produced by making alkyl borate react with either Grignard or organolithium reagents. However, these methods have a few drawbacks, they require low temperature conditions, and the yields of aryl boronic acids may decrease depending upon the substituent. Miyaura et al. reported that aryl boronate that is produced from diboron esters and aryl halides or aryl triflates can be used for the Suzuki-Miyaura Cross Coupling Reaction (eq. 10).<sup>8)</sup> Thus, aryl boronate is a useful compound that can be utilized directly in the Cross Coupling Reaction.



In conclusion, the Suzuki-Miyaura Cross Coupling Reaction is not only one of the most powerful methods used in the formation of C-C bonds, but it is also an extremely useful procedure in the construction of the carbon skeletons of many biologically important compounds.

## References

- 1) N. Miyaura, T. Yanagi, A. Suzuki, *Synth. Commun.* **1981**, 11, 513.
- 2) H. Zhang, F. Xue, T. C. W. Mak, K. S. Chan, *J. Org. Chem.* **1996**, 61, 8002; H. Zhang, K. S. Chan, *Tetrahedron Lett.* **1996**, 37, 1043.
- 3) D. Badone, M. Baroni, R. Cardamone, A. Ielmini, U. Guzzi, *J. Org. Chem.* **1997**, 62, 7170.
- 4) A. L. Casalnuovo, J. C. Calabrese, *J. Am. Chem. Soc.* **1990**, 112, 4324.
- 5) C. J. Mathews, P. J. Smith, T. Welton, *Chem. Commun.* **2000**, 1249.
- 6) R. Frenette, R. W. Friesen, *Tetrahedron Lett.* **1994**, 35, 9177.
- 7) S. Saito, M. Sakai, N. Miyaura, *Tetrahedron Lett.* **1996**, 37, 2993.
- 8) T. Ishiyama, M. Murata, N. Miyaura, *J. Org. Chem.* **1995**, 60, 7508; T. Ishiyama, Y. Itoh, T. Kitano, N. Miyaura, *Tetrahedron Lett.* **1997**, 38, 3447.

## Review

### Suzuki-Miyaura Cross Coupling Reaction

A. R. Martin, Y. Yang, *Acta Chem. Scand.* **1993**, 47, 221; N. Miyaura, A. Suzuki, *Chem. Rev.* **1995**, 95, 2457; A. Suzuki, *J. Organomet. Chem.* **1999**, 576, 147; P. Lloyd-Williams, E. Giralt, *Chem. Soc. Rev.* **2001**, 30, 145; A. J. J. Lennox, G. C. Lloyd-Jones, *Chem. Soc. Rev.* **2014**, 43, 412.

### Aryl-Aryl Bond Formation

S. P. Stanforth, *Tetrahedron* **1998**, 54, 263; J. Hassan, M. Séignou, C. Gozzi, E. Schulz, M. Lemaire, *Chem. Rev.* **2002**, 102, 1359.

### Carbon-Carbon Bond Forming Solid-Phase Reaction

B. A. Lorschach, M. J. Kurth, *J. Chem. Rev.* **1999**, 99, 1549; R. Franzén, *Can. J. Chem.* **2000**, 78, 957.

# The list of products

We introduce our products according to their structure.

## **Boronic Acids** . . . . . 5

Aryl Boronic Acids (Unsubstituted)  
Aryl Boronic Acids (Monosubstituted)  
Aryl Boronic Acids (Disubstituted)  
Aryl Boronic Acids (Trisubstituted)  
Aryl Boronic Acids (Pentasubstituted)  
Heteroaryl Boronic Acids  
Alkenyl Boronic Acids  
Alkyl Boronic Acids

## **Boronate Esters** . . . . . 15

## **Protected Boronic Acids** . . . . . 20

## **Trifluoroborate Salts** . . . . . 20

## **Diboronic Acid / Diboronic Acid Esters** . . . . . 21

## **Palladium Catalysts** . . . . . 21

## **Nickel Catalysts** . . . . . 23

## **Phosphine Ligands** . . . . . 23

## ***N*-Heterocyclic Carbene Ligands** . 25

## **Bases, Additive Agents** . . . . . 26

## **Metal Scavengers** . . . . . 26

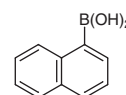
# Boronic Acids

## Aryl Boronic Acids (Unsubstituted)

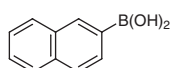
B0857 5g 25g 250g

Phenylboronic Acid  
CAS RN: 98-80-6

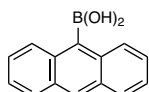
N0630 1g 5g 25g

1-Naphthaleneboronic Acid  
CAS RN: 13922-41-3

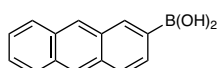
N0649 1g 5g 25g

2-Naphthaleneboronic Acid  
CAS RN: 32316-92-0

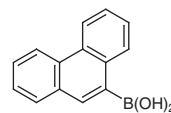
A2328 1g 5g

9-Anthraceneboronic Acid  
CAS RN: 100622-34-2

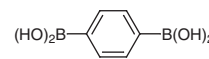
A1843 1g 5g

2-Anthraceneboronic Acid  
CAS RN: 141981-64-8

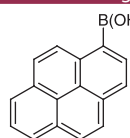
P1093 1g 5g

9-Phenanthreneboronic Acid  
CAS RN: 68572-87-2

P1358 1g 5g 25g

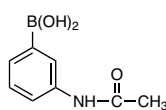
1,4-Phenylenediboronic Acid  
CAS RN: 4612-26-4

P1625 1g 5g 25g

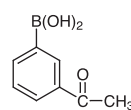
1-Pyreneboronic Acid  
CAS RN: 164461-18-1

## Aryl Boronic Acids (Mono-substituted)

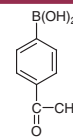
A2453 1g 5g

3-Acetamidophenylboronic Acid  
CAS RN: 78887-39-5

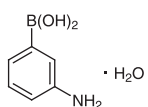
A1942 5g 25g

3-Acetylphenylboronic Acid  
CAS RN: 204841-19-0

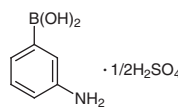
A1907 1g 5g

4-Acetylphenylboronic Acid  
CAS RN: 149104-90-5

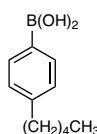
A1281 1g 5g 25g

3-Aminophenylboronic Acid Monohydrate  
CAS RN: 206658-89-1

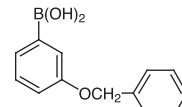
A1774 1g 5g 25g

3-Aminophenylboronic Acid Hemisulfate  
CAS RN: 66472-86-4

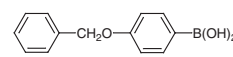
A2336 5g

4-Amylphenylboronic Acid  
CAS RN: 121219-12-3

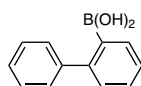
B3056 5g 25g

3-Benzyloxyphenylboronic Acid  
CAS RN: 156682-54-1

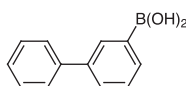
B2145 1g 5g

4-Benzyloxyphenylboronic Acid  
CAS RN: 146631-00-7

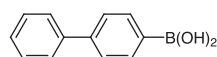
B2488 5g 25g

2-Biphenylboronic Acid  
CAS RN: 4688-76-0

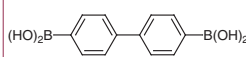
B2489 5g 25g

3-Biphenylboronic Acid  
CAS RN: 5122-95-2

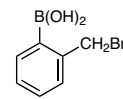
B2294 5g 25g

4-Biphenylboronic Acid  
CAS RN: 5122-94-1

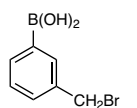
B2490 1g 5g

4,4'-Biphenyldiboronic Acid  
CAS RN: 4151-80-8

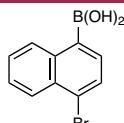
B3600 1g

2-(Bromomethyl)phenylboronic Acid  
CAS RN: 91983-14-1

B3814 1g 5g

3-(Bromomethyl)phenylboronic Acid  
CAS RN: 51323-43-4

B4463 1g

4-Bromo-1-naphthaleneboronic Acid  
CAS RN: 145965-14-6

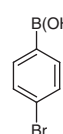
B2889 5g

2-Bromophenylboronic Acid  
CAS RN: 244205-40-1

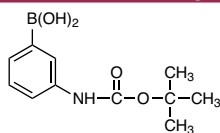
B2890 1g 5g 25g

3-Bromophenylboronic Acid  
CAS RN: 89598-96-9

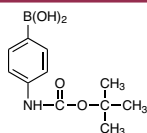
B1858 1g 5g 25g

4-Bromophenylboronic Acid  
CAS RN: 5467-74-3

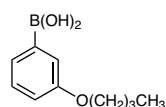
B4279 1g 5g

3-[(tert-Butoxycarbonyl)amino]phenylboronic Acid  
CAS RN: 380430-68-2

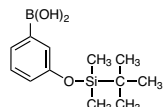
B4335 1g 5g

4-[(tert-Butoxycarbonyl)amino]phenylboronic Acid  
CAS RN: 380430-49-9

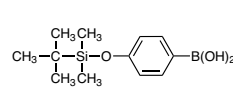
B4640 1g 5g

3-Butoxyphenylboronic Acid  
CAS RN: 352534-81-7

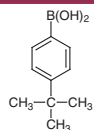
B3726 1g 5g

3-(tert-Butyldimethylsilyloxy)phenylboronic Acid  
CAS RN: 261621-12-9

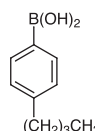
B3739 1g 5g

4-(tert-Butyldimethylsilyloxy)phenylboronic Acid  
CAS RN: 159191-56-7

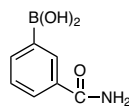
B2251 5g 25g

4-tert-Butylphenylboronic Acid  
CAS RN: 123324-71-0

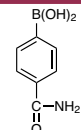
B2589 1g 5g

4-Butylphenylboronic Acid  
CAS RN: 145240-28-4

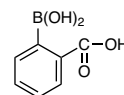
C2992 1g 5g

3-Carbamoylphenylboronic Acid  
CAS RN: 351422-73-6

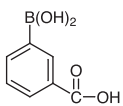
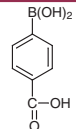
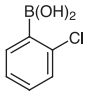
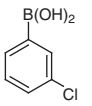
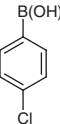
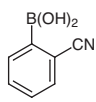
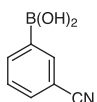
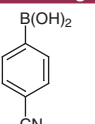
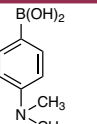
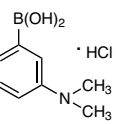
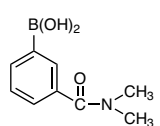
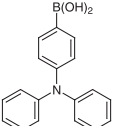
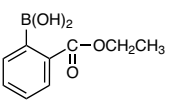
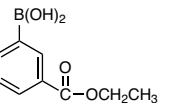
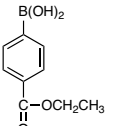
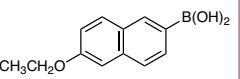
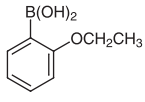
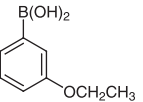
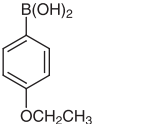
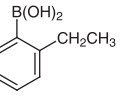
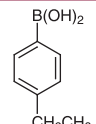
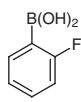
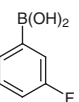
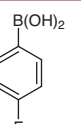
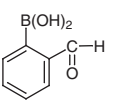
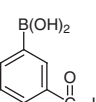
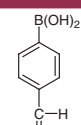
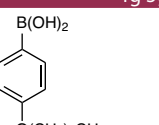
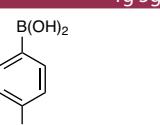
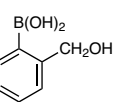
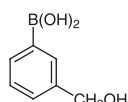
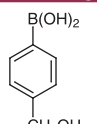
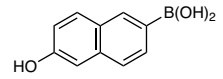
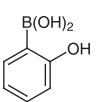
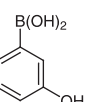
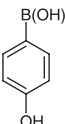
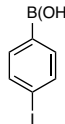
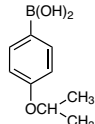
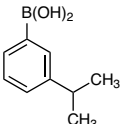
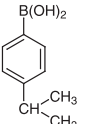
C2570 1g 5g

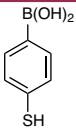
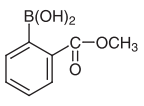
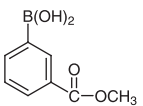
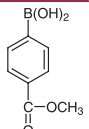
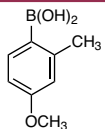
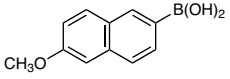
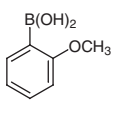
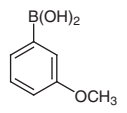
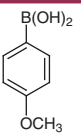
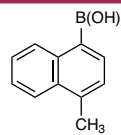
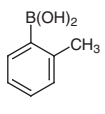
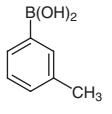
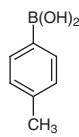
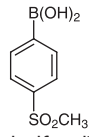
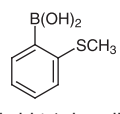
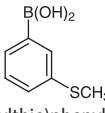
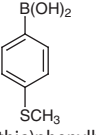
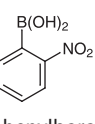
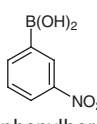
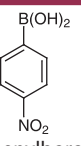
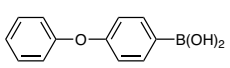
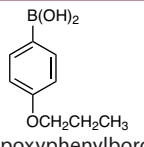
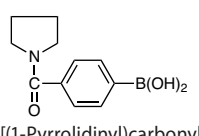
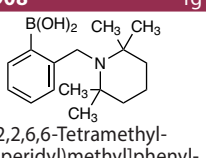
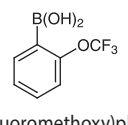
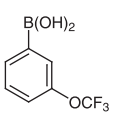
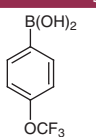
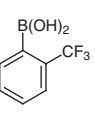
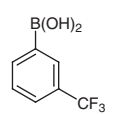
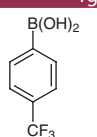
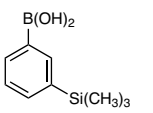
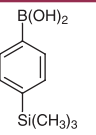
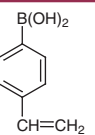
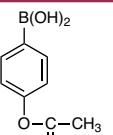
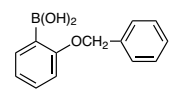
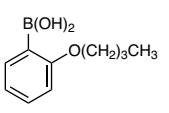
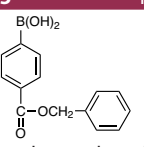
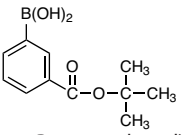
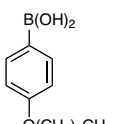
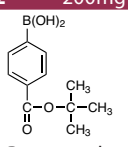
4-Carbamoylphenylboronic Acid  
CAS RN: 123088-59-5

C2501 1g 5g

2-Carboxyphenylboronic Acid  
CAS RN: 149105-19-1

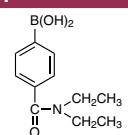
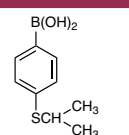
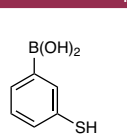
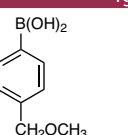
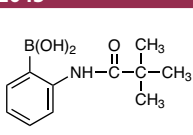
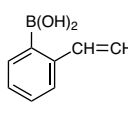
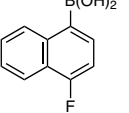
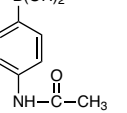
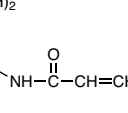
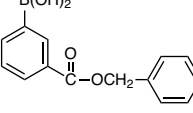
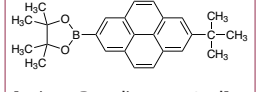
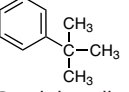
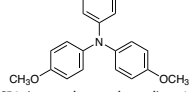
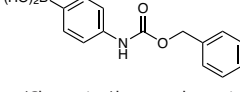
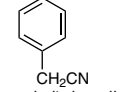
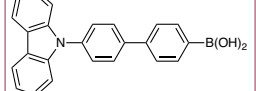
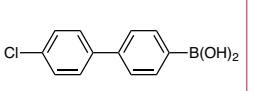
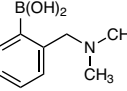
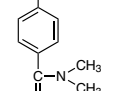
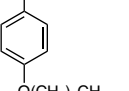
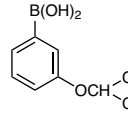
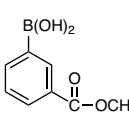
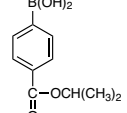
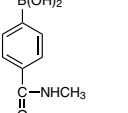
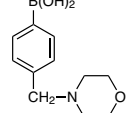
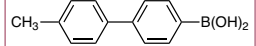
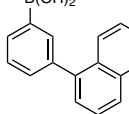
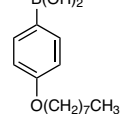
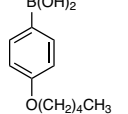
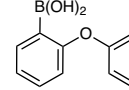
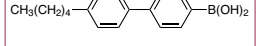
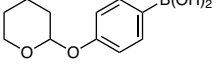
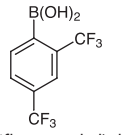
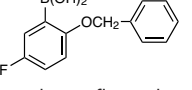
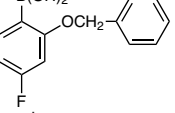
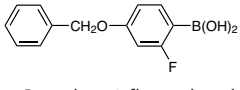
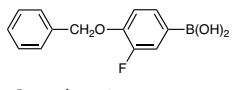
## Suzuki-Miyaura Cross Coupling Reaction

|                                                                                                                                                                           |                                                                                                                                                                            |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C2028</b> 1g 5g<br><br>3-Carboxyphenylboronic Acid<br>CAS RN: 25487-66-5              | <b>C1353</b> 1g 5g<br><br>4-Carboxyphenylboronic Acid<br>CAS RN: 14047-29-1               | <b>C1705</b> 1g 5g<br><br>2-Chlorophenylboronic Acid<br>CAS RN: 3900-89-8              | <b>C1613</b> 5g 25g<br><br>3-Chlorophenylboronic Acid<br>CAS RN: 63503-60-6         | <b>C1473</b> 5g 25g<br><br>4-Chlorophenylboronic Acid<br>CAS RN: 1679-18-1                          |
| <b>C2416</b> 1g 5g<br><br>2-Cyanophenylboronic Acid<br>CAS RN: 138642-62-3               | <b>C2031</b> 5g 25g<br><br>3-Cyanophenylboronic Acid<br>CAS RN: 150255-96-2               | <b>C1778</b> 1g 5g 25g<br><br>4-Cyanophenylboronic Acid<br>CAS RN: 126747-14-6         | <b>D4428</b> 1g 5g<br><br>4-(Dimethylamino)phenylboronic Acid<br>CAS RN: 28611-39-4 | <b>D4013</b> 1g 5g<br><br>3-(Dimethylamino)phenylboronic Acid Hydrochloride<br>CAS RN: 1256355-23-3 |
| <b>D4194</b> 1g 5g<br><br>3-(Dimethylcarbamoyl)phenylboronic Acid<br>CAS RN: 373384-14-6 | <b>D3537</b> 1g 5g<br><br>4-(Diphenylamino)phenylboronic Acid<br>CAS RN: 201802-67-7      | <b>E0877</b> 1g 5g<br><br>2-(Ethoxycarbonyl)phenylboronic Acid<br>CAS RN: 380430-53-5  | <b>E0848</b> 1g 5g<br><br>3-(Ethoxycarbonyl)phenylboronic Acid<br>CAS RN: 4334-87-6  | <b>E0868</b> 1g 5g<br><br>4-(Ethoxycarbonyl)phenylboronic Acid<br>CAS RN: 4334-88-7                 |
| <b>E1107</b> 1g 5g<br><br>6-Ethoxy-2-naphthaleneboronic Acid<br>CAS RN: 352525-98-5     | <b>E0723</b> 1g 5g<br><br>2-Ethoxyphenylboronic Acid<br>CAS RN: 213211-69-9              | <b>E0724</b> 1g 5g<br><br>3-Ethoxyphenylboronic Acid<br>CAS RN: 90555-66-1            | <b>E0725</b> 1g 5g<br><br>4-Ethoxyphenylboronic Acid<br>CAS RN: 22237-13-4          | <b>E0818</b> 1g 5g<br><br>2-Ethylphenylboronic Acid<br>CAS RN: 90002-36-1                          |
| <b>E0720</b> 5g 25g<br><br>4-Ethylphenylboronic Acid<br>CAS RN: 63139-21-9             | <b>F0407</b> 1g 5g 25g<br><br>2-Fluorophenylboronic Acid<br>CAS RN: 1993-03-9           | <b>F0404</b> 5g 25g<br><br>3-Fluorophenylboronic Acid<br>CAS RN: 768-35-4            | <b>F0361</b> 5g 25g<br><br>4-Fluorophenylboronic Acid<br>CAS RN: 1765-93-1        | <b>B1873</b> 1g 5g<br><br>2-Formylphenylboronic Acid<br>CAS RN: 40138-16-7                        |
| <b>F0445</b> 1g 5g 25g<br><br>3-Formylphenylboronic Acid<br>CAS RN: 87199-16-4         | <b>F0446</b> 1g 5g<br><br>4-Formylphenylboronic Acid<br>CAS RN: 87199-17-5              | <b>H1357</b> 1g 5g<br><br>4-Hexyloxyphenylboronic Acid<br>CAS RN: 121219-08-7        | <b>H1489</b> 1g 5g<br><br>4-Hexylphenylboronic Acid<br>CAS RN: 105365-50-2         | <b>H1345</b> 1g 5g<br><br>2-(Hydroxymethyl)phenylboronic Acid<br>CAS RN: 87199-14-2               |
| <b>H1244</b> 1g 5g<br><br>3-(Hydroxymethyl)phenylboronic Acid<br>CAS RN: 87199-15-3    | <b>H1204</b> 1g 5g 25g<br><br>4-(Hydroxymethyl)phenylboronic Acid<br>CAS RN: 59016-93-2 | <b>H1402</b> 1g 5g<br><br>6-Hydroxy-2-naphthaleneboronic Acid<br>CAS RN: 173194-95-1 | <b>H1184</b> 1g 5g<br><br>2-Hydroxyphenylboronic Acid<br>CAS RN: 89466-08-0        | <b>H1185</b> 1g 5g<br><br>3-Hydroxyphenylboronic Acid<br>CAS RN: 87199-18-6                       |
| <b>H1228</b> 1g 5g<br><br>4-Hydroxyphenylboronic Acid<br>CAS RN: 71597-85-8            | <b>I0830</b> 5g<br><br>4-Iodophenylboronic Acid<br>CAS RN: 5122-99-6                    | <b>I0806</b> 5g<br><br>4-Isopropoxyphenylboronic Acid<br>CAS RN: 153624-46-5         | <b>I0887</b> 1g 5g<br><br>3-Isopropylphenylboronic Acid<br>CAS RN: 216019-28-2     | <b>I0620</b> 1g 5g<br><br>4-Isopropylphenylboronic Acid<br>CAS RN: 16152-51-5                     |

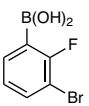
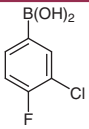
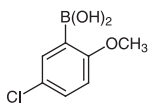
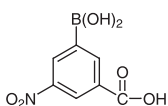
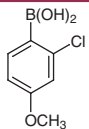
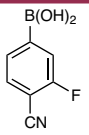
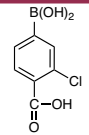
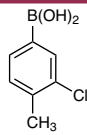
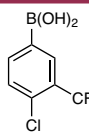
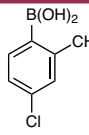
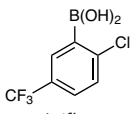
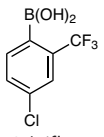
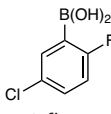
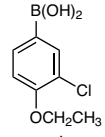
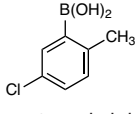
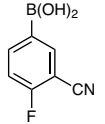
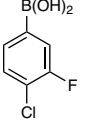
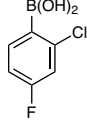
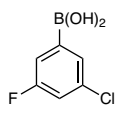
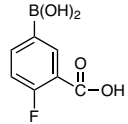
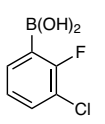
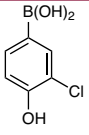
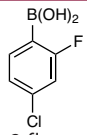
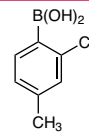
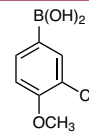
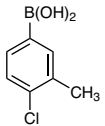
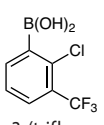
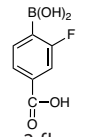
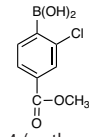
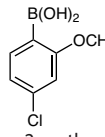
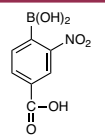
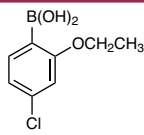
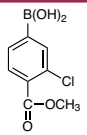
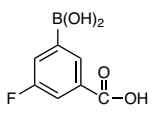
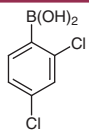
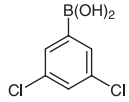
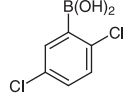
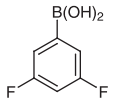
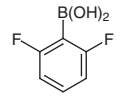
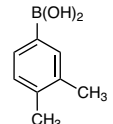
|                                                                                                                                                                          |                                                                                                                                                                             |                                                                                                                                                                                    |                                                                                                                                                                                                 |                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M2418</b> 1g 5g<br><br>4-Mercaptophenylboronic Acid<br>CAS RN: 237429-33-3           | <b>M1905</b> 1g 5g<br><br>2-(Methoxycarbonyl)phenylboronic Acid<br>CAS RN: 374538-03-1     | <b>M1906</b> 1g 5g 25g<br><br>3-(Methoxycarbonyl)phenylboronic Acid<br>CAS RN: 99769-19-4         | <b>M1907</b> 1g 5g 25g<br><br>4-(Methoxycarbonyl)phenylboronic Acid<br>CAS RN: 99768-12-4                    | <b>M2255</b> 1g 5g<br><br>4-Methoxy-2-methylphenylboronic Acid<br>CAS RN: 208399-66-0              |
| <b>M2256</b> 5g<br><br>6-Methoxy-2-naphthaleneboronic Acid<br>CAS RN: 156641-98-4       | <b>M1261</b> 1g 5g 25g<br><br>2-Methoxyphenylboronic Acid<br>CAS RN: 5720-06-9             | <b>M1322</b> 1g 5g 25g<br><br>3-Methoxyphenylboronic Acid<br>CAS RN: 10365-98-7                   | <b>M1252</b> 5g 25g<br><br>4-Methoxyphenylboronic Acid<br>CAS RN: 5720-07-0                                  | <b>M2457</b> 1g 5g<br><br>4-Methyl-1-naphthaleneboronic Acid<br>CAS RN: 103986-53-4                |
| <b>M1313</b> 5g 25g<br><br>2-Methylphenylboronic Acid<br>CAS RN: 16419-60-6             | <b>M1314</b> 1g 5g 25g<br><br>3-Methylphenylboronic Acid<br>CAS RN: 17933-03-8             | <b>M1126</b> 5g 25g<br><br>4-Methylphenylboronic Acid<br>CAS RN: 5720-05-8                        | <b>M1972</b> 1g 5g<br><br>4-(Methylsulfonyl)phenylboronic Acid<br>CAS RN: 149104-88-1                        | <b>M1570</b> 1g 5g<br><br>2-(Methylthio)phenylboronic Acid<br>CAS RN: 168618-42-6                  |
| <b>M1793</b> 5g<br><br>3-(Methylthio)phenylboronic Acid<br>CAS RN: 128312-11-8         | <b>M1458</b> 1g 5g<br><br>4-(Methylthio)phenylboronic Acid<br>CAS RN: 98546-51-1          | <b>N0811</b> 1g 5g<br><br>2-Nitrophenylboronic Acid<br>CAS RN: 5570-19-4                         | <b>N0563</b> 5g 25g<br><br>3-Nitrophenylboronic Acid<br>CAS RN: 13331-27-6                                  | <b>N0812</b> 1g 5g<br><br>4-Nitrophenylboronic Acid<br>CAS RN: 24067-17-2                         |
| <b>P1974</b> 5g 25g<br><br>4-Phenoxyphenylboronic Acid<br>CAS RN: 51067-38-0          | <b>P1968</b> 5g<br><br>4-Propoxyphenylboronic Acid<br>CAS RN: 186497-67-6                | <b>P2105</b> 1g 5g<br><br>4-[(1-Pyrrolidinyl)carbonyl]phenylboronic Acid<br>CAS RN: 389621-81-2 | <b>T2908</b> 1g<br><br>2-[(2,2,6,6-Tetramethyl-1-piperidyl)methyl]phenylboronic Acid<br>CAS RN: 815581-79-4 | <b>T2413</b> 1g 5g<br><br>2-(Trifluoromethoxy)phenylboronic Acid<br>CAS RN: 175676-65-0          |
| <b>T2362</b> 5g<br><br>3-(Trifluoromethoxy)phenylboronic Acid<br>CAS RN: 179113-90-7  | <b>T1773</b> 5g 25g<br><br>4-(Trifluoromethoxy)phenylboronic Acid<br>CAS RN: 139301-27-2 | <b>T1800</b> 1g 5g 25g<br><br>2-(Trifluoromethyl)phenylboronic Acid<br>CAS RN: 1423-27-4        | <b>T1793</b> 1g 5g<br><br>3-(Trifluoromethyl)phenylboronic Acid<br>CAS RN: 1423-26-3                       | <b>T1788</b> 1g 5g 25g<br><br>4-(Trifluoromethyl)phenylboronic Acid<br>CAS RN: 128796-39-4       |
| <b>T2663</b> 1g 5g<br><br>3-(Trimethylsilyl)phenylboronic Acid<br>CAS RN: 177171-16-3 | <b>T2664</b> 1g 5g<br><br>4-(Trimethylsilyl)phenylboronic Acid<br>CAS RN: 17865-11-1     | <b>V0075</b> 1g 5g<br><br>4-Vinylphenylboronic Acid<br>CAS RN: 2156-04-9                        | <b>A2818</b> 200mg 1g<br><br>4-Acetoxyphenylboronic Acid<br>CAS RN: 177490-82-3                            | <b>B4590</b> 1g 5g<br><br>2-Benzyloxyphenylboronic Acid<br>CAS RN: 190661-29-1                   |
| <b>B4700</b> 1g<br><br>2-Butoxyphenylboronic Acid<br>CAS RN: 91129-69-0               | <b>B4725</b> 1g 5g<br><br>4-(Benzyloxycarbonyl)phenylboronic Acid<br>CAS RN: 184000-11-1 | <b>B4726</b> 1g 5g<br><br>3-(tert-Butoxycarbonyl)phenylboronic Acid<br>CAS RN: 220210-56-0      | <b>B4727</b> 1g 5g<br><br>4-Butoxyphenylboronic Acid<br>CAS RN: 105365-51-3                                | <b>B4772</b> 200mg 1g 5g<br><br>4-(tert-Butoxycarbonyl)phenylboronic Acid<br>CAS RN: 850568-54-6 |



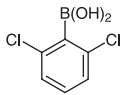
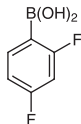
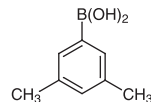
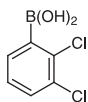
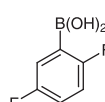
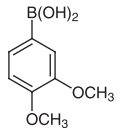
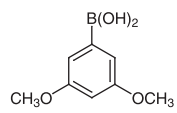
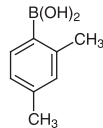
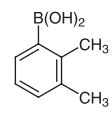
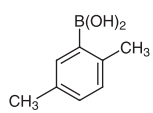
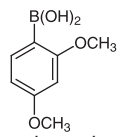
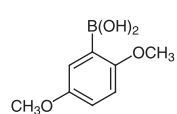
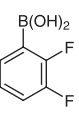
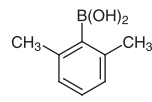
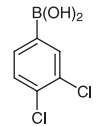
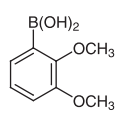
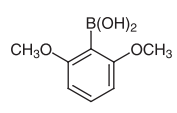
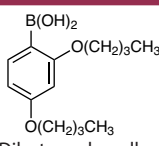
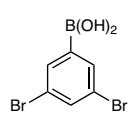
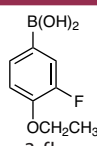
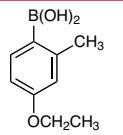
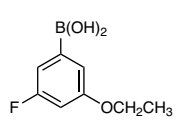
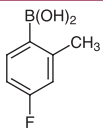
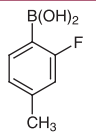
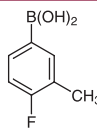
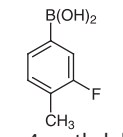
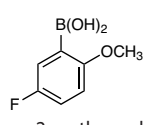
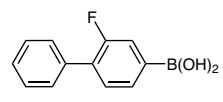
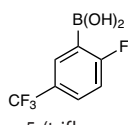
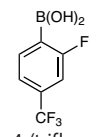
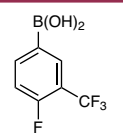
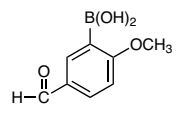
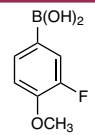
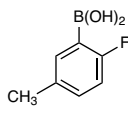
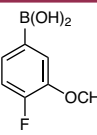
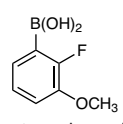
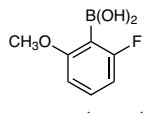
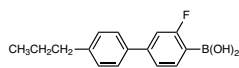
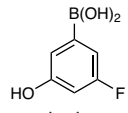
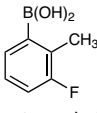
## Suzuki-Miyaura Cross Coupling Reaction

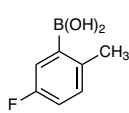
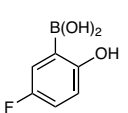
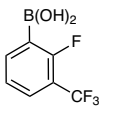
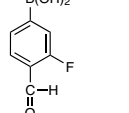
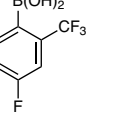
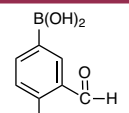
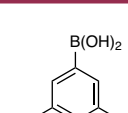
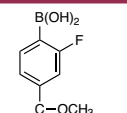
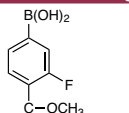
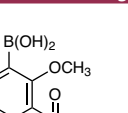
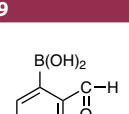
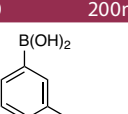
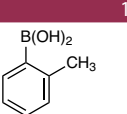
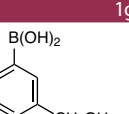
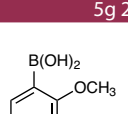
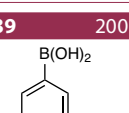
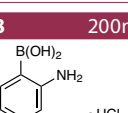
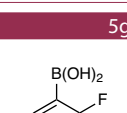
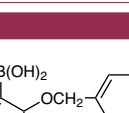
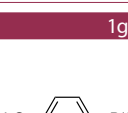
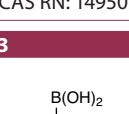
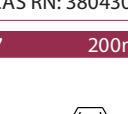
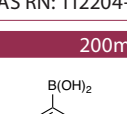
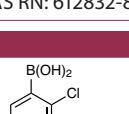
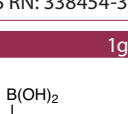
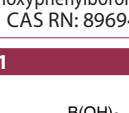
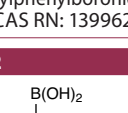
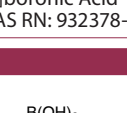
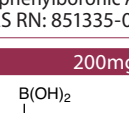
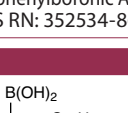
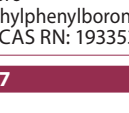
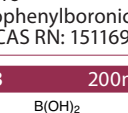
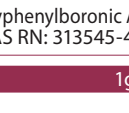
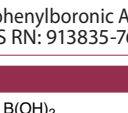
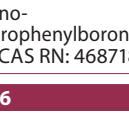
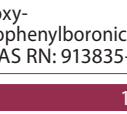
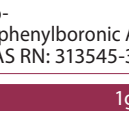
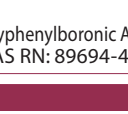
|                                                                                                                                                                                                   |                                                                                                                                                                                         |                                                                                                                                                                                 |                                                                                                                                                                                |                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D4681</b> 1g 5g<br><br>4-(Diethylcarbamoyl)-phenylboronic Acid<br>CAS RN: 389621-80-1                         | <b>I0950</b> 1g 5g<br><br>4-(Isopropylthio)phenylboronic Acid<br>CAS RN: 380427-38-3                   | <b>M2417</b> 1g 5g<br><br>3-Mercaptophenylboronic Acid<br>CAS RN: 352526-01-3                  | <b>M2677</b> 1g 5g<br><br>4-(Methoxymethyl)phenylboronic Acid<br>CAS RN: 279262-11-2         | <b>P2043</b> 1g<br><br>2-(Pivalamido)phenylboronic Acid<br>CAS RN: 146140-95-6             |
| <b>V0140</b> 1g 5g<br><br>2-Vinylphenylboronic Acid<br>CAS RN: 15016-42-9                                        | <b>F1080</b> 200mg 1g<br><br>4-Fluoro-1-naphthaleneboronic Acid<br>CAS RN: 182344-25-8                 | <b>A3140</b> 1g<br><br>4-Acetamidophenylboronic Acid<br>CAS RN: 101251-09-6                    | <b>A3199</b> 1g 5g<br><br>3-Acrylamidophenylboronic Acid<br>CAS RN: 99349-68-5               | <b>B5172</b> 1g<br><br>3-Carbobenzyloxybenzeneboronic Acid<br>CAS RN: 380430-52-4          |
| <b>B5489</b> 1g 5g<br><br>[7-( <i>tert</i> -Butyl)pyren-2-yl]-boronic Acid Pinacol Ester<br>CAS RN: 1270030-08-4 | <b>B6001</b> 1g 5g<br><br>3- <i>tert</i> -Butylphenylboronic Acid<br>CAS RN: 560132-24-3               | <b>B6005</b> 1g<br><br>[4-Bis(4-methoxyphenyl)amino]-phenylboronic Acid<br>CAS RN: 201802-29-1 | <b>B6070</b> 1g<br><br>4-(Cbz-amino)benzeneboronic Acid<br>CAS RN: 192804-36-7               | <b>C3231</b> 1g 5g<br><br>4-(Cyanomethyl)phenylboronic Acid<br>CAS RN: 91983-26-5          |
| <b>C3353</b> 200mg 1g<br><br>[4'-(Carbazol-9-yl)-4-biphenyl]boronic Acid<br>CAS RN: 858131-73-4                 | <b>C3614</b> 1g 5g<br><br>4'-Chloro-4-biphenylboronic Acid<br>CAS RN: 364044-44-0                     | <b>D5165</b> 1g<br><br>2-(Dimethylaminomethyl)-phenylboronic Acid<br>CAS RN: 85107-53-5       | <b>D5226</b> 1g 5g<br><br>4-(Dimethylcarbamoyl)-phenylboronic Acid<br>CAS RN: 405520-68-5   | <b>H1566</b> 1g 5g<br><br>4-Heptyloxyphenylboronic Acid<br>CAS RN: 136370-19-9            |
| <b>I0984</b> 1g 5g<br><br>3-Isopropoxyphenylboronic Acid<br>CAS RN: 216485-86-8                                | <b>I1000</b> 1g<br><br>3-(Isopropoxycarbonyl)-phenylboronic Acid<br>CAS RN: 342002-80-6              | <b>I1001</b> 1g<br><br>4-(Isopropoxycarbonyl)-phenylboronic Acid<br>CAS RN: 342002-82-8      | <b>M3056</b> 1g 5g<br><br>4-(Methylcarbamoyl)-phenylboronic Acid<br>CAS RN: 121177-82-0    | <b>M3128</b> 1g 5g<br><br>4-(Morpholinomethyl)-phenylboronic Acid<br>CAS RN: 279262-23-6 |
| <b>M3235</b> 1g 5g<br><br>4'-Methyl-4-biphenylboronic Acid<br>CAS RN: 393870-04-7                              | <b>N1131</b> 1g 5g<br><br>3-(1-Naphthyl)phenylboronic Acid<br>CAS RN: 881913-20-8                    | <b>O0462</b> 1g<br><br>4- <i>n</i> -Octyloxyphenylboronic Acid<br>CAS RN: 121554-09-4        | <b>P2358</b> 1g 5g<br><br>4-Pentyloxyphenylboronic Acid<br>CAS RN: 146449-90-3             | <b>P2539</b> 1g 5g<br><br>2-Phenoxyphenylboronic Acid<br>CAS RN: 108238-09-1             |
| <b>P2717</b> 1g 5g<br><br>4'-Pentyl-4-biphenylboronic Acid<br>CAS RN: 121554-18-5                              | <b>T3325</b> 5g 25g<br><br>4-(Tetrahydro-2H-pyran-2-yloxy)-phenylboronic Acid<br>CAS RN: 182281-01-2 | <b>Aryl Boronic Acids (Disubstituted)</b>                                                                                                                                       |                                                                                                                                                                                |                                                                                                                                                                               |
| <b>B3022</b> 1g 5g<br><br>2,4-Bis(trifluoromethyl)phenylboronic Acid<br>CAS RN: 153254-09-2                    | <b>B3683</b> 1g 5g<br><br>2-Benzyloxy-5-fluorophenylboronic Acid<br>CAS RN: 779331-47-4              | <b>B3779</b> 1g 5g<br><br>2-Benzyloxy-4-fluorophenylboronic Acid<br>CAS RN: 848779-87-3      | <b>B4638</b> 200mg 1g<br><br>4-Benzyloxy-2-fluorophenylboronic Acid<br>CAS RN: 166744-78-1 | <b>B4639</b> 1g 5g<br><br>4-Benzyloxy-3-fluorophenylboronic Acid<br>CAS RN: 133057-83-7  |



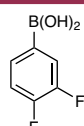
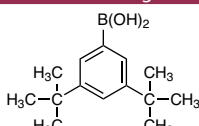
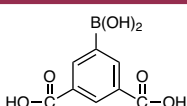
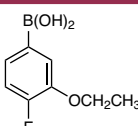
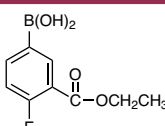
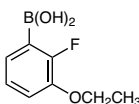
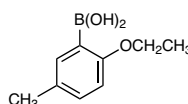
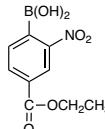
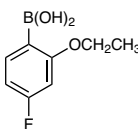
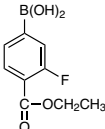
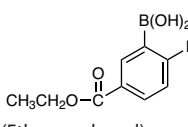
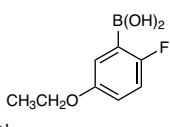
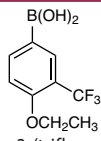
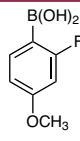
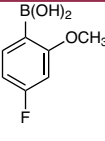
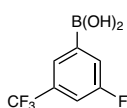
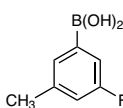
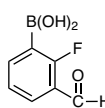
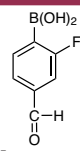
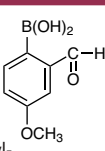
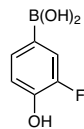
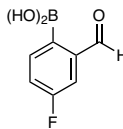
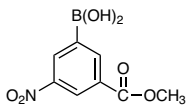
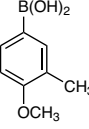
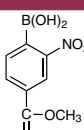
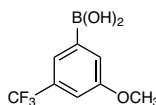
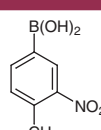
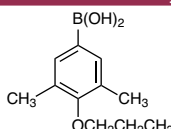
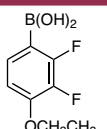
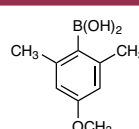
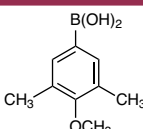
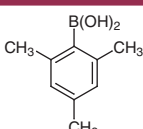
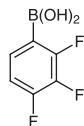
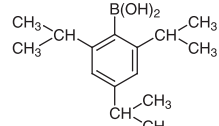
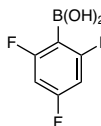
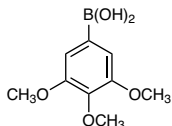
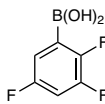
|                                                                                                                                                                                  |                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>B5137</b> 1g 5g<br><br>3-Bromo-2-fluorophenylboronic Acid<br>CAS RN: 352535-97-8             | <b>C1760</b> 1g 5g<br><br>3-Chloro-4-fluorophenylboronic Acid<br>CAS RN: 144432-85-9                 | <b>C2292</b> 5g 25g<br><br>5-Chloro-2-methoxyphenylboronic Acid<br>CAS RN: 89694-48-4             | <b>C2385</b> 1g 5g<br><br>3-Carboxy-5-nitrophenylboronic Acid<br>CAS RN: 101084-81-5               | <b>C2386</b> 1g 5g<br><br>2-Chloro-4-methoxyphenylboronic Acid<br>CAS RN: 219735-99-6      |
| <b>C2456</b> 1g 5g<br><br>4-Cyano-3-fluorophenylboronic Acid<br>CAS RN: 843663-18-3             | <b>C2523</b> 1g 5g<br><br>4-Carboxy-3-chlorophenylboronic Acid<br>CAS RN: 136496-72-5                | <b>C2525</b> 1g 5g<br><br>3-Chloro-4-methylphenylboronic Acid<br>CAS RN: 175883-63-3              | <b>C2571</b> 1g 5g<br><br>4-Chloro-3-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 176976-42-4   | <b>C2577</b> 1g 5g<br><br>4-Chloro-2-methylphenylboronic Acid<br>CAS RN: 209919-30-2       |
| <b>C2591</b> 1g 5g<br><br>2-Chloro-5-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 182344-18-9 | <b>C2601</b> 1g 5g<br><br>4-Chloro-2-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 313545-41-4      | <b>C2645</b> 5g<br><br>5-Chloro-2-fluorophenylboronic Acid<br>CAS RN: 352535-83-2                 | <b>C2664</b> 1g 5g<br><br>3-Chloro-4-ethoxyphenylboronic Acid<br>CAS RN: 279261-81-3              | <b>C2665</b> 1g 5g<br><br>5-Chloro-2-methylphenylboronic Acid<br>CAS RN: 148839-33-2       |
| <b>C2676</b> 1g<br><br>3-Cyano-4-fluorophenylboronic Acid<br>CAS RN: 214210-21-6               | <b>C2749</b> 1g 5g<br><br>4-Chloro-3-fluorophenylboronic Acid<br>CAS RN: 137504-86-0                | <b>C2772</b> 5g 25g<br><br>2-Chloro-4-fluorophenylboronic Acid<br>CAS RN: 313545-72-1            | <b>C2914</b> 1g 5g<br><br>3-Chloro-5-fluorophenylboronic Acid<br>CAS RN: 328956-61-2             | <b>C2945</b> 1g 5g<br><br>3-Carboxy-4-fluorophenylboronic Acid<br>CAS RN: 872460-12-3     |
| <b>C2946</b> 1g 5g<br><br>3-Chloro-2-fluorophenylboronic Acid<br>CAS RN: 352535-82-1          | <b>C2969</b> 1g 5g<br><br>3-Chloro-4-hydroxyphenylboronic Acid<br>CAS RN: 182344-13-4              | <b>C3048</b> 1g 5g<br><br>4-Chloro-2-fluorophenylboronic Acid<br>CAS RN: 160591-91-3            | <b>C3049</b> 1g 5g<br><br>2-Chloro-4-methylphenylboronic Acid<br>CAS RN: 145349-62-8            | <b>C3056</b> 1g 5g<br><br>3-Chloro-4-methoxyphenylboronic Acid<br>CAS RN: 175883-60-0    |
| <b>C3071</b> 1g 5g<br><br>4-Chloro-3-methylphenylboronic Acid<br>CAS RN: 161950-10-3          | <b>C3213</b> 200mg 1g<br><br>2-Chloro-3-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 957061-11-9 | <b>C3220</b> 1g 5g<br><br>4-Carboxy-2-fluorophenylboronic Acid<br>CAS RN: 851335-07-4           | <b>C3224</b> 1g 5g<br><br>2-Chloro-4-(methoxycarbonyl)phenylboronic Acid<br>CAS RN: 603122-80-1 | <b>C3248</b> 200mg 1g<br><br>4-Chloro-2-methoxyphenylboronic Acid<br>CAS RN: 762287-57-0 |
| <b>C3265</b> 1g 5g<br><br>4-Carboxy-2-nitrophenylboronic Acid<br>CAS RN: 85107-54-6           | <b>C3267</b> 200mg 1g<br><br>4-Chloro-2-ethoxyphenylboronic Acid<br>CAS RN: 850568-80-8            | <b>C3279</b> 1g 5g<br><br>3-Chloro-4-(methoxycarbonyl)phenylboronic Acid<br>CAS RN: 603122-82-3 | <b>C3287</b> 1g 5g<br><br>3-Carboxy-5-fluorophenylboronic Acid<br>CAS RN: 871329-84-9           | <b>D2494</b> 1g 5g 25g<br><br>2,4-Dichlorophenylboronic Acid<br>CAS RN: 68716-47-2       |
| <b>D2909</b> 5g<br><br>3,5-Dichlorophenylboronic Acid<br>CAS RN: 67492-50-6                   | <b>D3044</b> 5g 25g<br><br>2,5-Dichlorophenylboronic Acid<br>CAS RN: 135145-90-3                   | <b>D3081</b> 5g 25g<br><br>3,5-Difluorophenylboronic Acid<br>CAS RN: 156545-07-2                | <b>D3087</b> 1g 5g 25g<br><br>2,6-Difluorophenylboronic Acid<br>CAS RN: 162101-25-9             | <b>D3110</b> 1g 5g<br><br>3,4-Dimethylphenylboronic Acid<br>CAS RN: 55499-43-9           |

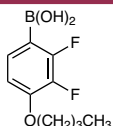
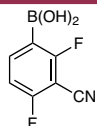
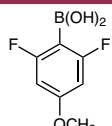
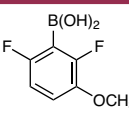
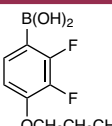
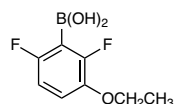
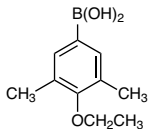
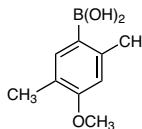
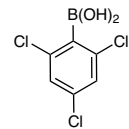
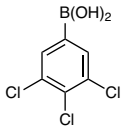
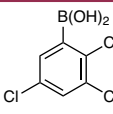
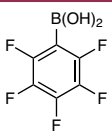
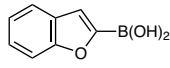
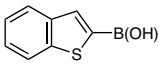
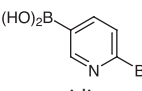
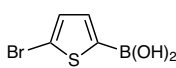
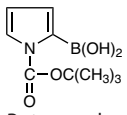
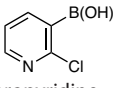
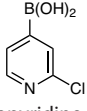
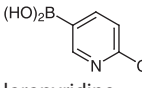
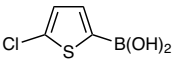
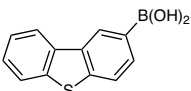
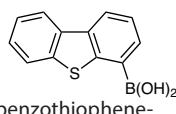
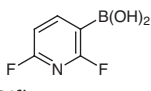
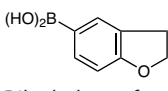
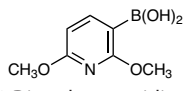
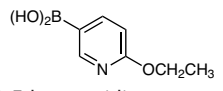
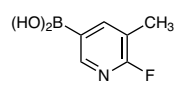
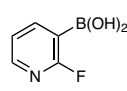
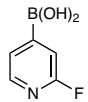
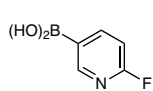
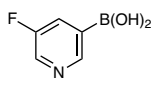
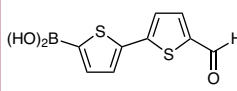
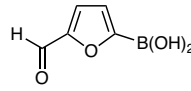
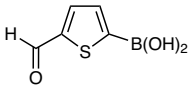
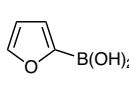
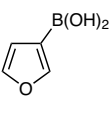
## Suzuki-Miyaura Cross Coupling Reaction

|                                                                                                                                                                                    |                                                                                                                                                                            |                                                                                                                                                                               |                                                                                                                                                                                     |                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D3357</b> 1g 5g<br><br>2,6-Dichlorophenylboronic Acid<br>CAS RN: 73852-17-2                    | <b>D3391</b> 5g 25g<br><br>2,4-Difluorophenylboronic Acid<br>CAS RN: 144025-03-6          | <b>D3396</b> 5g 25g<br><br>3,5-Dimethylphenylboronic Acid<br>CAS RN: 172975-69-8             | <b>D3434</b> 5g 25g<br><br>2,3-Dichlorophenylboronic Acid<br>CAS RN: 151169-74-3                  | <b>D3436</b> 5g 25g<br><br>2,5-Difluorophenylboronic Acid<br>CAS RN: 193353-34-3                  |
| <b>D3512</b> 5g 25g<br><br>3,4-Dimethoxyphenylboronic Acid<br>CAS RN: 122775-35-3                 | <b>D3513</b> 1g 5g 25g<br><br>3,5-Dimethoxyphenylboronic Acid<br>CAS RN: 192182-54-0      | <b>D3514</b> 1g 5g<br><br>2,4-Dimethylphenylboronic Acid<br>CAS RN: 55499-44-0               | <b>D3516</b> 5g<br><br>2,3-Dimethylphenylboronic Acid<br>CAS RN: 183158-34-1                      | <b>D3517</b> 1g 5g 25g<br><br>2,5-Dimethylphenylboronic Acid<br>CAS RN: 85199-06-0                |
| <b>D3521</b> 1g 5g<br><br>2,4-Dimethoxyphenylboronic Acid<br>CAS RN: 133730-34-4                  | <b>D3522</b> 1g 5g<br><br>2,5-Dimethoxyphenylboronic Acid<br>CAS RN: 107099-99-0          | <b>D3523</b> 5g 25g<br><br>2,3-Difluorophenylboronic Acid<br>CAS RN: 121219-16-7             | <b>D3633</b> 1g 5g<br><br>2,6-Dimethylphenylboronic Acid<br>CAS RN: 100379-00-8                   | <b>D3783</b> 5g 25g<br><br>3,4-Dichlorophenylboronic Acid<br>CAS RN: 151169-75-4                  |
| <b>D3853</b> 1g 5g<br><br>2,3-Dimethoxyphenylboronic Acid<br>CAS RN: 40972-86-9                  | <b>D3861</b> 5g 25g<br><br>2,6-Dimethoxyphenylboronic Acid<br>CAS RN: 23112-96-1         | <b>D4263</b> 1g 5g<br><br>2,4-Dibutoxyphenylboronic Acid<br>CAS RN: 870778-89-5             | <b>D4670</b> 5g 25g<br><br>3,5-Dibromophenylboronic Acid<br>CAS RN: 117695-55-3                  | <b>E1124</b> 1g 5g<br><br>4-Ethoxy-3-fluorophenylboronic Acid<br>CAS RN: 279263-10-4             |
| <b>E1173</b> 1g 5g<br><br>4-Ethoxy-2-methylphenylboronic Acid<br>CAS RN: 313545-31-2            | <b>E1205</b> 200mg 1g<br><br>3-Ethoxy-5-fluorophenylboronic Acid<br>CAS RN: 850589-53-6 | <b>F0666</b> 1g 5g<br><br>4-Fluoro-2-methylphenylboronic Acid<br>CAS RN: 139911-29-8       | <b>F0683</b> 1g 5g<br><br>2-Fluoro-4-methylphenylboronic Acid<br>CAS RN: 170981-26-7            | <b>F0697</b> 5g 25g<br><br>4-Fluoro-3-methylphenylboronic Acid<br>CAS RN: 139911-27-6           |
| <b>F0712</b> 1g 5g<br><br>3-Fluoro-4-methylphenylboronic Acid<br>CAS RN: 168267-99-0            | <b>F0775</b> 5g 25g<br><br>5-Fluoro-2-methoxyphenylboronic Acid<br>CAS RN: 179897-94-0  | <b>F0785</b> 1g 5g<br><br>2-Fluoro-4-biphenylboronic Acid<br>CAS RN: 178305-99-2           | <b>F0788</b> 1g 5g<br><br>2-Fluoro-5-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 352535-96-7 | <b>F0816</b> 1g 5g<br><br>2-Fluoro-4-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 503309-11-3 |
| <b>F0830</b> 1g 5g<br><br>4-Fluoro-3-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 182344-23-6 | <b>F0834</b> 1g 5g<br><br>5-Formyl-2-methoxyphenylboronic Acid<br>CAS RN: 127972-02-5   | <b>F0876</b> 1g 5g<br><br>3-Fluoro-4-methoxyphenylboronic Acid<br>CAS RN: 149507-26-6      | <b>F0915</b> 1g 5g<br><br>2-Fluoro-5-methylphenylboronic Acid<br>CAS RN: 166328-16-1            | <b>F0919</b> 1g 5g<br><br>4-Fluoro-3-methoxyphenylboronic Acid<br>CAS RN: 854778-31-7           |
| <b>F0940</b> 1g 5g<br><br>2-Fluoro-3-methoxyphenylboronic Acid<br>CAS RN: 352303-67-4           | <b>F0941</b> 1g 5g<br><br>2-Fluoro-6-methoxyphenylboronic Acid<br>CAS RN: 78495-63-3    | <b>F0942</b> 1g 5g<br><br>3-Fluoro-4'-propyl-4-biphenylboronic Acid<br>CAS RN: 909709-42-8 | <b>F0954</b> 1g<br><br>3-Fluoro-5-hydroxyphenylboronic Acid<br>CAS RN: 871329-82-7              | <b>F0955</b> 1g<br><br>3-Fluoro-2-methylphenylboronic Acid<br>CAS RN: 163517-61-1               |

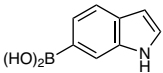
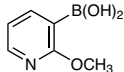
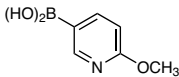
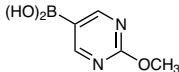
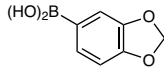
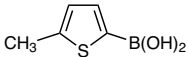
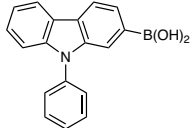
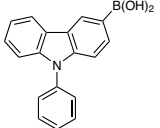
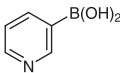
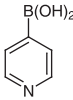
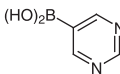
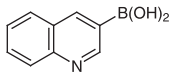
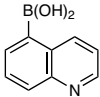
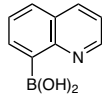
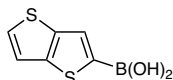
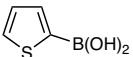
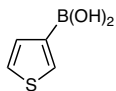
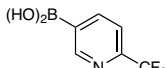
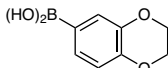
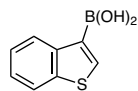
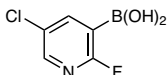
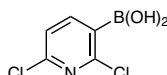
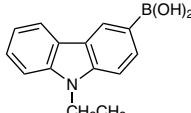
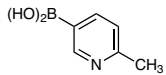
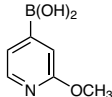
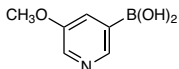
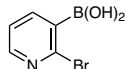
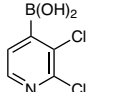
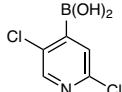
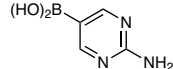
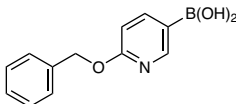
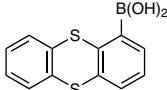
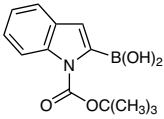
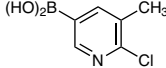
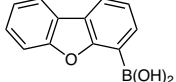
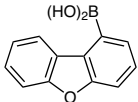
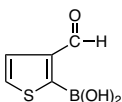
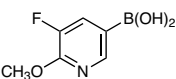
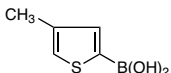
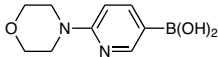
|                                                                                                                                                                                      |                                                                                                                                                                                                  |                                                                                                                                                                                    |                                                                                                                                                                                    |                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>F0976</b> 1g 5g<br><br>5-Fluoro-2-methylphenylboronic Acid<br>CAS RN: 163517-62-2                | <b>F0977</b> 1g 5g<br><br>5-Fluoro-2-hydroxyphenylboronic Acid<br>CAS RN: 259209-20-6                           | <b>F1006</b> 1g 5g<br><br>2-Fluoro-3-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 157834-21-4   | <b>F1051</b> 1g 5g<br><br>3-Fluoro-4-formylphenylboronic Acid<br>CAS RN: 248270-25-9            | <b>F1052</b> 1g 5g<br><br>4-Fluoro-2-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 182344-16-7 |
| <b>F1061</b> 1g 5g<br><br>4-Fluoro-3-formylphenylboronic Acid<br>CAS RN: 374538-01-9                | <b>F1063</b> 1g 5g<br><br>3-Fluoro-5-methoxyphenylboronic Acid<br>CAS RN: 609807-25-2                           | <b>F1071</b> 1g 5g<br><br>2-Fluoro-4-(methoxycarbonyl)phenylboronic Acid<br>CAS RN: 603122-84-5   | <b>F1087</b> 1g 5g<br><br>3-Fluoro-4-(methoxycarbonyl)phenylboronic Acid<br>CAS RN: 505083-04-5 | <b>F1088</b> 1g 5g<br><br>3-Formyl-2-methoxyphenylboronic Acid<br>CAS RN: 480424-49-5           |
| <b>F1089</b> 1g 5g<br><br>3-Fluoro-2-formylphenylboronic Acid<br>CAS RN: 871126-15-7                | <b>F1090</b> 200mg 1g<br><br>4-Fluoro-3-(hydroxymethyl)phenylboronic Acid<br>CAS RN: 481681-02-1                | <b>H1495</b> 1g 5g<br><br>4-Hydroxy-2-methylphenylboronic Acid<br>CAS RN: 493035-82-8             | <b>H1563</b> 1g 5g<br><br>3-(Hydroxymethyl)-4-methoxyphenylboronic Acid<br>CAS RN: 908142-03-0  | <b>M2311</b> 5g 25g<br><br>2-Methoxy-5-methylphenylboronic Acid<br>CAS RN: 127972-00-3          |
| <b>M2839</b> 200mg 1g<br><br>4-Methoxy-3-(trifluoromethyl)phenylboronic Acid<br>CAS RN: 149507-36-8 | <b>A3028</b> 200mg 1g<br><br>2-Amino-4-(methoxycarbonyl)phenylboronic Acid Hydrochloride<br>CAS RN: 380430-55-7 | <b>B5065</b> 5g 25g<br><br>5-Bromo-2-fluorophenylboronic Acid<br>CAS RN: 112204-57-6              | <b>B5076</b> 1g<br><br>2-Benzyloxy-5-chlorophenylboronic Acid<br>CAS RN: 612832-83-4            | <b>B5169</b> 1g 5g<br><br>4-Benzyloxy-3-methylphenylboronic Acid<br>CAS RN: 338454-30-1         |
| <b>B5173</b> 1g 5g<br><br>5-Bromo-2-methoxyphenylboronic Acid<br>CAS RN: 89694-45-1               | <b>B5257</b> 200mg 1g<br><br>4-Benzyloxy-2-formylphenylboronic Acid<br>CAS RN: 139962-97-3                    | <b>B6032</b> 200mg 1g<br><br>[3,5-Bis(ethoxycarbonyl)phenyl]boronic Acid<br>CAS RN: 932378-94-4 | <b>C2916</b> 1g<br><br>4-Carboxy-2-chlorophenylboronic Acid<br>CAS RN: 851335-09-6            | <b>C3210</b> 1g 5g<br><br>5-Chloro-2-ethoxyphenylboronic Acid<br>CAS RN: 352534-86-2          |
| <b>C3211</b> 1g 5g<br><br>2-Chloro-5-methylphenylboronic Acid<br>CAS RN: 193353-35-4              | <b>C3212</b> 1g 5g<br><br>4-Chloro-3-nitrophenylboronic Acid<br>CAS RN: 151169-67-4                           | <b>C3214</b> 1g<br><br>3-Cyano-2-fluorophenylboronic Acid<br>CAS RN: 957121-05-0                | <b>C3222</b> 200mg 1g<br><br>2-Chloro-4-ethoxyphenylboronic Acid<br>CAS RN: 313545-44-7       | <b>C3223</b> 1g<br><br>4-Chloro-2-formylphenylboronic Acid<br>CAS RN: 913835-76-4             |
| <b>C3227</b> 1g 5g<br><br>5-Cyano-2-fluorophenylboronic Acid<br>CAS RN: 468718-30-1               | <b>C3233</b> 200mg 1g<br><br>4-Carboxy-3-nitrophenylboronic Acid<br>CAS RN: 80500-28-3                        | <b>C3246</b> 1g 5g<br><br>5-Carboxy-2-chlorophenylboronic Acid<br>CAS RN: 913835-75-3           | <b>C3247</b> 1g 5g<br><br>2-Chloro-6-fluorophenylboronic Acid<br>CAS RN: 313545-32-3          | <b>C3253</b> 1g<br><br>4-Chloro-3-methoxyphenylboronic Acid<br>CAS RN: 89694-47-3             |
| <b>C3266</b> 1g<br><br>3-Chloro-5-cyanophenylboronic Acid<br>CAS RN: 915763-60-9                  | <b>C3320</b> 200mg 1g<br><br>4-Chloro-3-(methoxycarbonyl)phenylboronic Acid<br>CAS RN: 874219-45-1            | <b>C3361</b> 1g 5g<br><br>2-Chloro-6-methoxyphenylboronic Acid<br>CAS RN: 385370-80-9           | <b>C3432</b> 1g 5g<br><br>2-Chloro-5-methoxyphenylboronic Acid<br>CAS RN: 89694-46-2          | <b>C3563</b> 1g<br><br>(2-Chloro-3-fluorophenyl)boronic Acid<br>CAS RN: 871329-52-1           |

## Suzuki-Miyaura Cross Coupling Reaction

|                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                      |                                                                                                                                                                               |                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D3350</b> 5g 25g<br><br>3,4-Difluorophenylboronic Acid<br>CAS RN: 168267-41-2                  | <b>D5072</b> 200mg 500mg<br><br>3,5-Di-tert-butylphenylboronic Acid<br>CAS RN: 197223-39-5          | <b>D5073</b> 1g<br><br>3,5-Dicarboxyphenylboronic Acid<br>CAS RN: 881302-73-4                       | <b>E1183</b> 1g<br><br>3,5-Dicarboxyphenylboronic Acid<br>CAS RN: 900174-65-4               | <b>E1187</b> 1g 5g<br><br>3-(Ethoxycarbonyl)-4-fluorophenylboronic Acid<br>CAS RN: 874219-36-0 |
| <b>E1188</b> 1g<br><br>3-Ethoxy-2-fluorophenylboronic Acid<br>CAS RN: 855230-61-4                 | <b>E1189</b> 1g 5g<br><br>2-Ethoxy-5-methylphenylboronic Acid<br>CAS RN: 123291-97-4                | <b>E1203</b> 1g<br><br>4-Ethoxycarbonyl-2-nitrophenylboronic Acid<br>CAS RN: 5785-70-6              | <b>E1204</b> 1g 5g<br><br>4-Ethoxycarbonyl-2-nitrophenylboronic Acid<br>CAS RN: 480438-58-2 | <b>E1207</b> 1g 5g<br><br>4-(Ethoxycarbonyl)-3-fluorophenylboronic Acid<br>CAS RN: 874288-38-7 |
| <b>E1209</b> 200mg 1g<br><br>5-(Ethoxycarbonyl)-2-fluorophenylboronic Acid<br>CAS RN: 874219-60-0 | <b>E1235</b> 1g 5g<br><br>5-Ethoxy-2-fluorophenylboronic Acid<br>CAS RN: 900174-60-9                | <b>E1236</b> 200mg 1g<br><br>4-Ethoxy-3-(trifluoromethyl)-phenylboronic Acid<br>CAS RN: 871329-83-8 | <b>F1048</b> 1g 5g<br><br>2-Fluoro-4-methoxyphenylboronic Acid<br>CAS RN: 162101-31-7       | <b>F1062</b> 1g 5g<br><br>4-Fluoro-2-methoxyphenylboronic Acid<br>CAS RN: 179899-07-1          |
| <b>F1064</b> 1g<br><br>3-Fluoro-5-(trifluoromethyl)-phenylboronic Acid<br>CAS RN: 159020-59-4    | <b>F1068</b> 1g 5g<br><br>3-Fluoro-5-methylphenylboronic Acid<br>CAS RN: 850593-06-5               | <b>F1078</b> 1g<br><br>2-Fluoro-3-formylphenylboronic Acid<br>CAS RN: 849061-98-9                  | <b>F1079</b> 1g<br><br>2-Fluoro-4-formylphenylboronic Acid<br>CAS RN: 871126-22-6          | <b>F1108</b> 1g 5g<br><br>2-Formyl-4-methoxyphenylboronic Acid<br>CAS RN: 139962-95-1         |
| <b>F1132</b> 1g 5g<br><br>3-Fluoro-4-hydroxyphenylboronic Acid<br>CAS RN: 182344-14-5           | <b>F1260</b> 1g 5g<br><br>4-Fluoro-2-formylphenylboronic Acid<br>CAS RN: 825644-26-6              | <b>M2808</b> 1g 5g<br><br>3-(Methoxycarbonyl)-5-nitrophenylboronic Acid<br>CAS RN: 117342-20-8    | <b>M2809</b> 1g 5g<br><br>4-Methoxy-3-methylphenylboronic Acid<br>CAS RN: 175883-62-2     |                                                                                                                                                                                   |
| <b>M2854</b> 1g 5g<br><br>4-(Methoxycarbonyl)-2-nitrophenylboronic Acid<br>CAS RN: 85107-55-7   | <b>M2943</b> 1g 5g<br><br>3-Methoxy-5-(trifluoromethyl)-phenylboronic Acid<br>CAS RN: 871332-97-7 | <b>M1127</b> 1g 5g<br><br>4-Methyl-3-nitrophenylboronic Acid<br>CAS RN: 80500-27-2                | <b>Aryl Boronic Acids (Tri-substituted)</b>                                                                                                                                   |                                                                                                                                                                                   |
| <b>D5080</b> 1g 5g<br><br>3,5-Dimethyl-4-propoxyphenylboronic Acid<br>CAS RN: 357611-51-9       | <b>E1192</b> 1g 5g<br><br>4-Ethoxy-2,3-difluorophenylboronic Acid<br>CAS RN: 212386-71-5          | <b>M2244</b> 1g 5g<br><br>4-Methoxy-2,6-dimethylphenylboronic Acid<br>CAS RN: 361543-99-9         |                                                                                                                                                                               |                                                                                                                                                                                   |
| <b>M2685</b> 1g 5g<br><br>4-Methoxy-3,5-dimethylphenylboronic Acid<br>CAS RN: 301699-39-8      | <b>T1960</b> 1g 5g<br><br>2,4,6-Trimethylphenylboronic Acid<br>CAS RN: 5980-97-2                | <b>T2574</b> 5g<br><br>2,3,4-Trifluorophenylboronic Acid<br>CAS RN: 226396-32-3                   | <b>T2654</b> 1g 5g<br><br>2,4,6-Triisopropylphenylboronic Acid<br>CAS RN: 154549-38-9      | <b>T2804</b> 1g 5g<br><br>2,4,6-Trifluorophenylboronic Acid<br>CAS RN: 182482-25-3             |
| <b>T2837</b> 1g<br><br>3,4,5-Trimethoxyphenylboronic Acid<br>CAS RN: 182163-96-8               | <b>T2874</b> 5g<br><br>2,3,5-Trifluorophenylboronic Acid<br>CAS RN: 247564-73-4                 |                                                                                                                                                                                      |                                                                                                                                                                               |                                                                                                                                                                                   |

|                                                                                                                                                                             |                                                                                                                                                                             |                                                                                                                                                                          |                                                                                                                                                                              |                                                                                                                                                                                    |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>B5174</b> 1g 5g<br><br>4-Butoxy-2,3-difluorophenylboronic Acid<br>CAS RN: 156487-12-6   | <b>C3226</b> 200mg 1g<br><br>3-Cyano-2,4-difluorophenylboronic Acid<br>CAS RN: 871940-31-7 | <b>D4728</b> 1g<br><br>2,6-Difluoro-4-methoxyphenylboronic Acid<br>CAS RN: 406482-20-0  | <b>D5006</b> 1g 5g<br><br>2,6-Difluoro-3-methoxyphenylboronic Acid<br>CAS RN: 870779-02-5 | <b>D5083</b> 1g 5g<br><br>2,3-Difluoro-4-propoxyphenylboronic Acid<br>CAS RN: 212837-49-5       |  |
| <b>E1210</b> 1g 5g<br><br>3-Ethoxy-2,6-difluorophenylboronic Acid<br>CAS RN: 849062-00-6   | <b>E1216</b> 1g 5g<br><br>4-Ethoxy-3,5-dimethylphenylboronic Acid<br>CAS RN: 850568-59-1   | <b>M2838</b> 1g<br><br>4-Methoxy-2,5-dimethylphenylboronic Acid<br>CAS RN: 246023-54-1  | <b>T3382</b> 1g<br><br>2,4,6-Trichlorophenylboronic Acid<br>CAS RN: 73852-18-3            | <b>T3383</b> 1g 5g<br><br>3,4,5-Trichlorophenylboronic Acid<br>CAS RN: 862248-93-9              |  |
| <b>T3851</b> 1g 5g<br><br>2,3,5-Trichlorophenylboronic Acid<br>CAS RN: 212779-19-6         | <b>Aryl Boronic Acids (Penta-substituted)</b>                                                                                                                               |                                                                                                                                                                          | <b>P1904</b> 1g 5g<br><br>Pentafluorophenylboronic Acid<br>CAS RN: 1582-24-7                | <b>Heteroaryl Boronic Acids</b>                                                                                                                                                    |  |
| <b>B2978</b> 1g<br><br>Benzofuran-2-boronic Acid<br>CAS RN: 98437-24-2                    | <b>B2893</b> 1g 5g 25g<br><br>Benzo[b]thiophene-2-ylboronic Acid<br>CAS RN: 98437-23-1    | <b>B3307</b> 1g 5g<br><br>2-Bromopyridine-5-boronic Acid<br>CAS RN: 223463-14-7        | <b>B2862</b> 1g 5g<br><br>5-Bromo-2-thiopheneboronic Acid<br>CAS RN: 162607-17-2          | <b>B4063</b> 1g 5g<br><br>1-(tert-Butoxycarbonyl)-2-pyrroleboronic Acid<br>CAS RN: 135884-31-0 |  |
| <b>C2560</b> 1g 5g<br><br>2-Chloropyridine-3-boronic Acid<br>CAS RN: 381248-04-0         | <b>C2589</b> 1g 5g<br><br>2-Chloropyridine-4-boronic Acid<br>CAS RN: 458532-96-2         | <b>C2288</b> 1g 5g<br><br>2-Chloropyridine-5-boronic Acid<br>CAS RN: 444120-91-6      | <b>C2066</b> 1g 5g<br><br>5-Chloro-2-thiopheneboronic Acid<br>CAS RN: 162607-18-3        | <b>D4373</b> 1g 5g<br><br>Dibenzothiophene-2-boronic Acid<br>CAS RN: 668983-97-9              |  |
| <b>D4057</b> 1g 5g<br><br>Dibenzothiophene-4-boronic Acid<br>CAS RN: 108847-20-7         | <b>D4006</b> 1g 5g<br><br>2,6-Difluoro-3-pyridineboronic Acid<br>CAS RN: 136466-94-9     | <b>D4711</b> 200mg<br><br>2,3-Dihydrobenzofuran-5-boronic Acid<br>CAS RN: 227305-69-3 | <b>D4690</b> 1g 5g<br><br>2,6-Dimethoxypyridine-3-boronic Acid<br>CAS RN: 221006-70-8    | <b>E1115</b> 1g 5g<br><br>2-Ethoxypyridine-5-boronic Acid<br>CAS RN: 612845-44-0              |  |
| <b>F0984</b> 1g<br><br>2-Fluoro-3-methylpyridine-5-boronic Acid<br>CAS RN: 904326-92-7   | <b>F0739</b> 5g 25g<br><br>2-Fluoropyridine-3-boronic Acid<br>CAS RN: 174669-73-9        | <b>F0935</b> 1g 5g<br><br>2-Fluoropyridine-4-boronic Acid<br>CAS RN: 401815-98-3      | <b>F0770</b> 1g 5g<br><br>2-Fluoropyridine-5-boronic Acid<br>CAS RN: 351019-18-6        | <b>F0859</b> 1g 5g<br><br>5-Fluoropyridine-3-boronic Acid<br>CAS RN: 872041-86-6              |  |
| <b>F0548</b> 1g<br><br>5'-Formyl-2,2'-bithiophene-5-boronic Acid<br>CAS RN: 1369328-62-0 | <b>F0611</b> 1g 5g<br><br>5-Formyl-2-furanboronic Acid<br>CAS RN: 27329-70-0             | <b>F0549</b> 1g 5g<br><br>5-Formyl-2-thiopheneboronic Acid<br>CAS RN: 4347-33-5       | <b>F0394</b> 1g 5g<br><br>2-Furylboronic Acid<br>CAS RN: 13331-23-2                     | <b>F0438</b> 1g 5g<br><br>3-Furylboronic Acid<br>CAS RN: 55552-70-0                           |  |

## Suzuki-Miyaura Cross Coupling Reaction

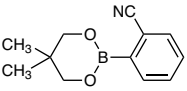
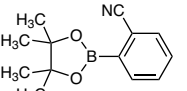
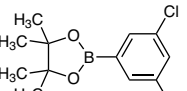
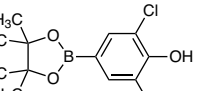
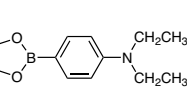
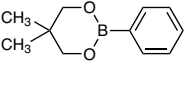
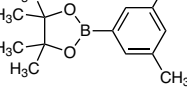
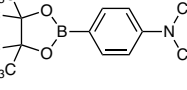
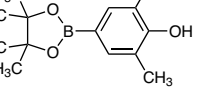
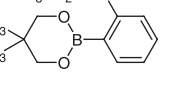
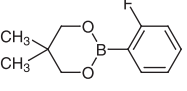
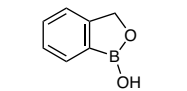
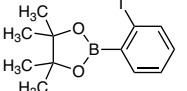
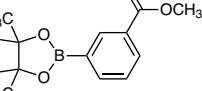
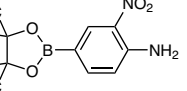
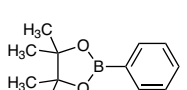
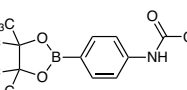
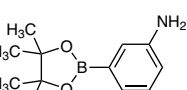
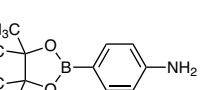
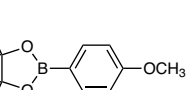
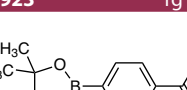
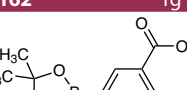
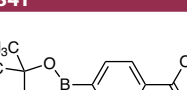
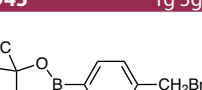
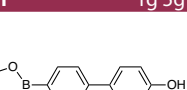
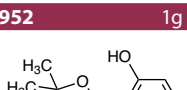
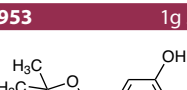
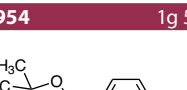
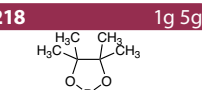
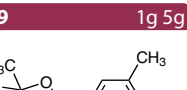
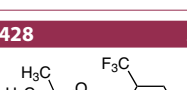
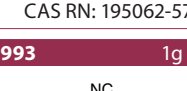
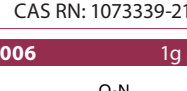
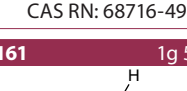
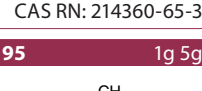
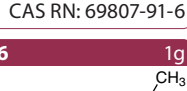
|                                                                                                                                                                           |                                                                                                                                                                         |                                                                                                                                                                                  |                                                                                                                                                                                     |                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>I0803</b> 1g<br><br>6-Indoleboronic Acid<br>CAS RN: 147621-18-9                       | <b>M2159</b> 1g 5g<br><br>2-Methoxypyridine-3-boronic Acid<br>CAS RN: 163105-90-6      | <b>M2029</b> 1g 5g<br><br>2-Methoxypyridine-5-boronic Acid<br>CAS RN: 163105-89-3               | <b>M2335</b> 1g 5g<br><br>2-Methoxy-5-pyrimidylboronic Acid<br>CAS RN: 628692-15-9                | <b>M2035</b> 5g 25g<br><br>3,4-(Methylenedioxy)phenylboronic Acid<br>CAS RN: 94839-07-3 |
| <b>M1850</b> 1g 5g<br><br>5-Methyl-2-thiopheneboronic Acid<br>CAS RN: 162607-20-7        | <b>P2169</b> 200mg 1g<br><br>9-Phenylcarbazole-2-boronic Acid<br>CAS RN: 1001911-63-2  | <b>P2001</b> 5g 25g<br><br>9-Phenylcarbazole-3-boronic Acid<br>CAS RN: 854952-58-2              | <b>P1673</b> 1g 5g 25g<br><br>3-Pyridylboronic Acid<br>CAS RN: 1692-25-7                          | <b>P1594</b> 1g 5g<br><br>4-Pyridylboronic Acid<br>CAS RN: 1692-15-5                    |
| <b>P1759</b> 100mg 1g<br><br>5-Pyrimidylboronic Acid<br>CAS RN: 109299-78-7              | <b>Q0080</b> 1g 5g<br><br>Quinoline-3-boronic Acid<br>CAS RN: 191162-39-7              | <b>Q0087</b> 200mg<br><br>Quinoline-5-boronic Acid<br>CAS RN: 355386-94-6                       | <b>Q0086</b> 200mg 1g<br><br>Quinoline-8-boronic Acid<br>CAS RN: 86-58-8                          | <b>T2621</b> 1g<br><br>Thieno[3,2-b]thiophene-2-boronic Acid<br>CAS RN: 160032-40-6     |
| <b>T1772</b> 1g 5g 25g<br><br>2-Thiopheneboronic Acid<br>CAS RN: 6165-68-0              | <b>T1975</b> 1g 5g<br><br>3-Thiopheneboronic Acid<br>CAS RN: 6165-69-1                | <b>T3188</b> 1g<br><br>2-(Trifluoromethyl)pyridine-5-boronic Acid<br>CAS RN: 868662-36-6       | <b>B4181</b> 1g<br><br>1,4-Benzodioxane-6-boronic Acid<br>CAS RN: 164014-95-3                    | <b>B4774</b> 1g 5g<br><br>Benzo[b]thiophene-3-boronic Acid<br>CAS RN: 113893-08-6      |
| <b>C3125</b> 1g<br><br>5-Chloro-2-fluoropyridine-3-boronic Acid<br>CAS RN: 937595-70-5 | <b>D4707</b> 1g 5g<br><br>2,6-Dichloropyridine-3-boronic Acid<br>CAS RN: 148493-34-9 | <b>E1153</b> 1g 5g<br><br>9-Ethylcarbazole-3-boronic Acid<br>CAS RN: 669072-93-9              | <b>M2253</b> 1g 5g<br><br>2-Methylpyridine-5-boronic Acid Hydrochloride<br>CAS RN: 2096333-73-0 | <b>M2730</b> 1g 5g<br><br>2-Methoxypyridine-4-boronic Acid<br>CAS RN: 762262-09-9     |
| <b>M2810</b> 1g 5g<br><br>5-Methoxypyridine-3-boronic Acid<br>CAS RN: 850991-69-4      | <b>B5170</b> 1g 5g<br><br>2-Bromopyridine-3-boronic Acid<br>CAS RN: 452972-08-6      | <b>D5081</b> 1g 5g<br><br>2,3-Dichloropyridine-4-boronic Acid<br>CAS RN: 951677-39-7          | <b>D5082</b> 1g 5g<br><br>2,5-Dichloropyridine-4-boronic Acid<br>CAS RN: 847664-64-6            | <b>A2900</b> 1g<br><br>2-Aminopyrimidine-5-boronic Acid<br>CAS RN: 936250-22-5        |
| <b>B5889</b> 1g 5g<br><br>6-Benzyloxy pyridine-3-boronic Acid<br>CAS RN: 929250-35-1   | <b>T3706</b> 1g 5g<br><br>1-Thianthrenylboronic Acid<br>CAS RN: 108847-76-3          | <b>B5145</b> 1g<br><br>1-Boc-indole-2-boronic Acid<br>CAS RN: 213318-44-6                     | <b>C3588</b> 1g 5g<br><br>2-Chloro-3-methylpyridine-5-boronic Acid<br>CAS RN: 1003043-40-0      | <b>D4567</b> 1g 5g<br><br>Dibenzofuran-4-boronic Acid<br>CAS RN: 100124-06-9          |
| <b>D5758</b> 1g 5g<br><br>Dibenzofuran-1-boronic Acid<br>CAS RN: 162607-19-4           | <b>F0801</b> 1g 5g<br><br>3-Formyl-2-thiopheneboronic Acid<br>CAS RN: 17303-83-2     | <b>F1237</b> 200mg 1g<br><br>3-Fluoro-2-methoxypyridine-5-boronic Acid<br>CAS RN: 856250-60-7 | <b>M2840</b> 1g 5g<br><br>4-Methyl-2-thiopheneboronic Acid<br>CAS RN: 162607-15-0               | <b>M2967</b> 1g<br><br>2-(Morpholino)pyridine-5-boronic Acid<br>CAS RN: 904326-93-8   |

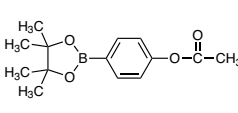
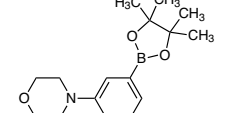
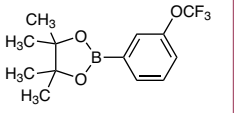
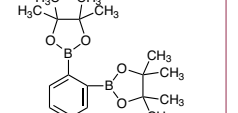
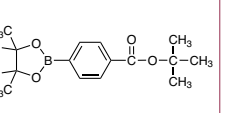
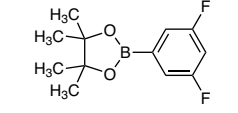
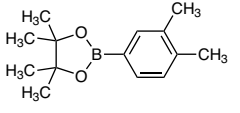
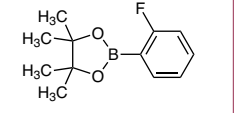
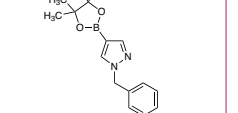
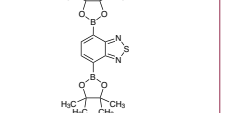
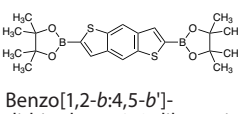
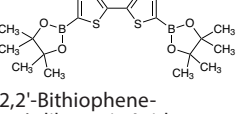
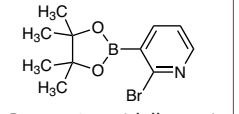
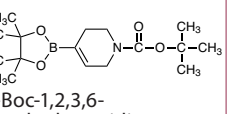
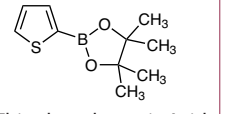
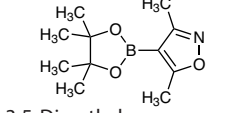
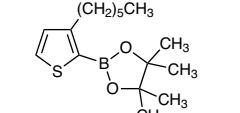
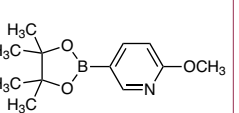
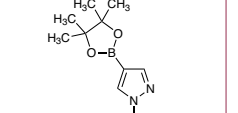
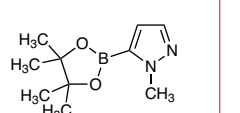
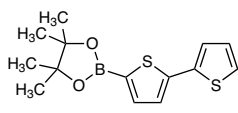
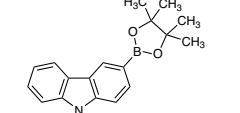
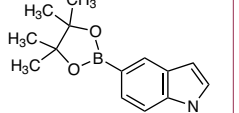
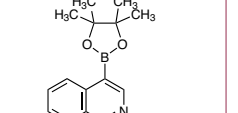
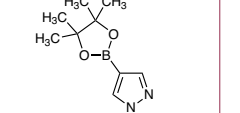
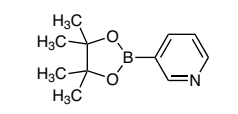
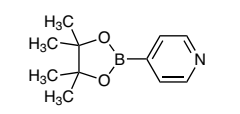
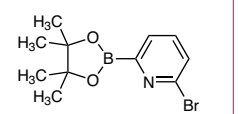
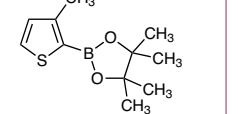
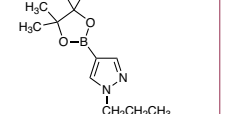
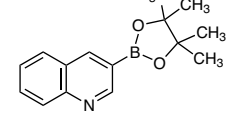
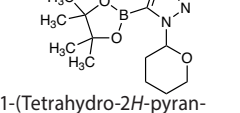
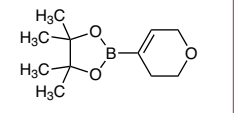
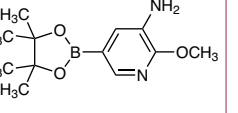
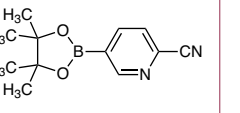
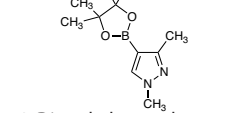
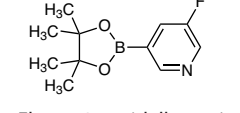
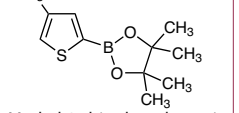
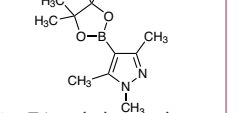
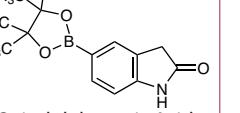


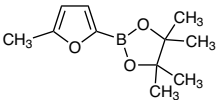
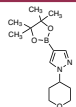
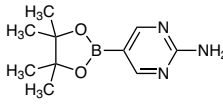
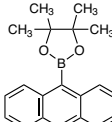
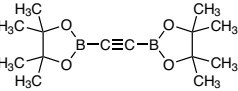
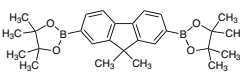
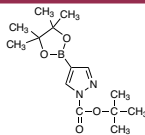
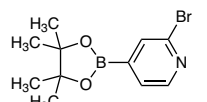
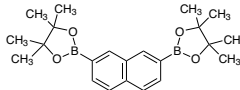
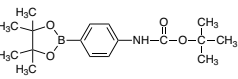
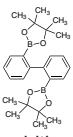
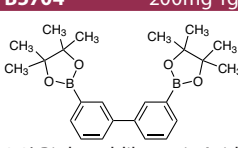
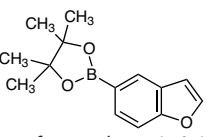
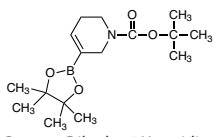
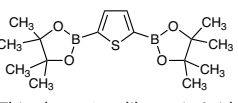
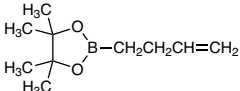
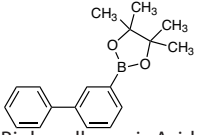
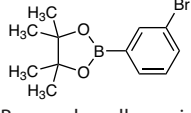
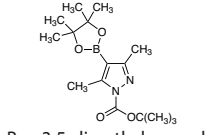
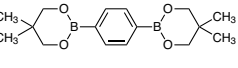
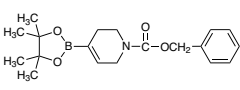
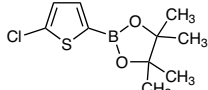
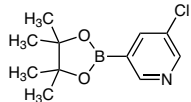
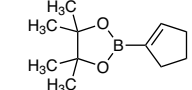
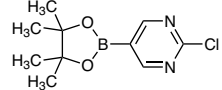
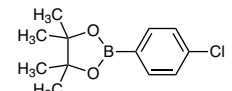
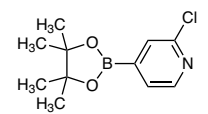
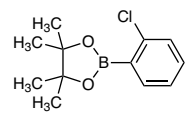
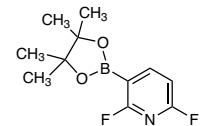
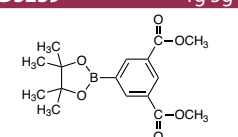
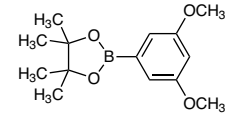
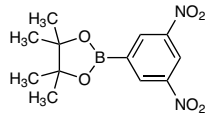
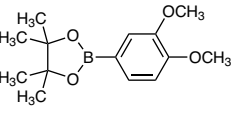
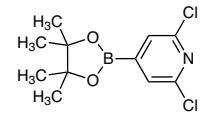
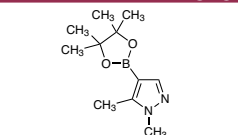
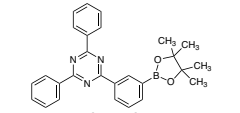
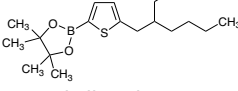
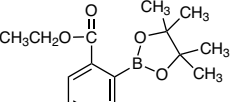
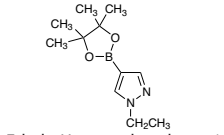
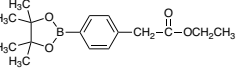
|                                                                                                   |                                                                                                     |                                                                                                     |                                                                                              |                                                                                                  |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>P2282</b> 1g<br><br>4-(2-Phenyl-1H-benzimidazol-1-yl)phenylboronic Acid<br>CAS RN: 867044-33-5 | <b>P2403</b> 1g<br><br>5-(1-Propynyl)pyridine-3-boronic Acid<br>CAS RN: 917471-30-8                 | <b>P2478</b> 1g 5g<br><br>1H-Pyrazole-4-boronic Acid<br>CAS RN: 763120-58-7                         | <b>Alkenyl Boronic Acids</b>                                                                 | <b>C2893</b> 1g 5g<br><br>1-Cyclopentenylboronic Acid<br>CAS RN: 850036-28-1                     |
| <b>F0280</b> 100mg 1g<br><br>Ferroceneboronic Acid<br>CAS RN: 12152-94-2                          | <b>F0664</b> 1g<br><br>1,1'-Ferrocenediboronic Acid<br>CAS RN: 32841-83-1                           | <b>Alkyl Boronic Acid</b>                                                                           | <b>M1553</b> 1g 5g<br><br>Methylboronic Acid<br>CAS RN: 13061-96-6                           | <b>E0913</b> 1g 5g<br><br>Ethylboronic Acid<br>CAS RN: 4433-63-0                                 |
| <b>P1942</b> 1g 5g 25g<br><br>Propylboronic Acid<br>CAS RN: 17745-45-8                            | <b>I0787</b> 5g 25g<br><br>Isopropylboronic Acid<br>CAS RN: 80041-89-0                              | <b>B0529</b> 1g 5g 25g<br><br>Butylboronic Acid<br>CAS RN: 4426-47-5                                | <b>I0597</b> 5g 25g<br><br>Isobutylboronic Acid<br>CAS RN: 84110-40-7                        | <b>P2267</b> 5g 25g<br><br>Pentylboronic Acid<br>CAS RN: 4737-50-2                               |
| <b>H0913</b> 1g 5g<br><br>Hexylboronic Acid<br>CAS RN: 16343-08-1                                 | <b>O0452</b> 1g 5g<br><br>n-Octylboronic Acid<br>CAS RN: 28741-08-4                                 | <b>P2476</b> 1g 5g<br><br>2-Phenylethylboronic Acid<br>CAS RN: 34420-17-2                           | <b>C2442</b> 1g 5g<br><br>Cyclopentylboronic Acid<br>CAS RN: 63076-51-7                      | <b>C2188</b> 1g 5g<br><br>Cyclohexylboronic Acid<br>CAS RN: 4441-56-9                            |
| <b>Boronate Esters</b>                                                                            |                                                                                                     |                                                                                                     |                                                                                              |                                                                                                  |
| <b>B3199</b> 1g 5g<br><br>(Bromomethyl)boronic Acid Pinacol Ester<br>CAS RN: 166330-03-6          | <b>C2707</b> 1g<br><br>1-Cyclohexeneboronic Acid Pinacol Ester<br>CAS RN: 141091-37-4               | <b>D3738</b> 1g 5g<br><br>Allylboronic Acid Diisopropyl Ester<br>CAS RN: 51851-79-7                 | <b>D3649</b> 1g 5g<br><br>(Bromomethyl)boronic Acid Diisopropyl Ester<br>CAS RN: 137297-49-5 | <b>E1116</b> 1g 5g<br><br>Ethylboronic Acid Pinacol Ester<br>CAS RN: 82954-89-0                  |
| <b>M2071</b> 5g<br><br>4-Methoxybenzylboronic Acid Pinacol Ester<br>CAS RN: 475250-52-3           | <b>B4103</b> 1g 5g<br><br>Bis[(pinacolato)boryl]-methane<br>CAS RN: 78782-17-9                      | <b>C3101</b> 1g 5g<br><br>Cyclohexylboronic Acid Pinacol Ester<br>CAS RN: 87100-15-0                | <b>E1074</b> 200mg 1g<br><br>Ethynylboronic Acid Pinacol Ester<br>CAS RN: 347389-74-6        | <b>B4633</b> 5g 25g<br><br>1,4-Benzenediboronic Acid Bis(pinacolato) Ester<br>CAS RN: 99770-93-1 |
| <b>B3019</b> 5g<br><br>4-Biphenylboronic Acid Pinacol Ester<br>CAS RN: 1444T32-80-4               | <b>B3151</b> 1g<br><br>4,4'-Biphenyldiboronic Acid Bis(neopentyl Glycol)-Ester<br>CAS RN: 5487-93-4 | <b>B3501</b> 1g 5g<br><br>1,1'-Ferrocenediboronic Acid Bis(pinacolato) Ester<br>CAS RN: 737776-93-1 | <b>B2828</b> 1g 5g<br><br>2-Bromophenylboronic Acid Pinacol Ester<br>CAS RN: 269410-06-2     | <b>C2004</b> 1g<br><br>2-Chlorophenylboronic Acid Neopentyl Glycol Ester<br>CAS RN: 346656-42-6  |

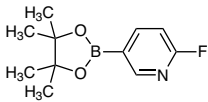
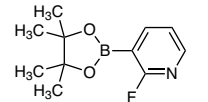
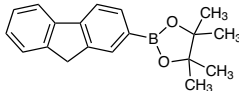
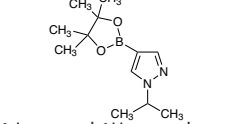
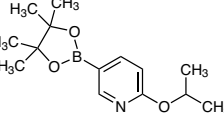
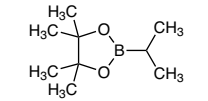
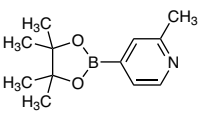
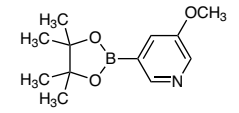
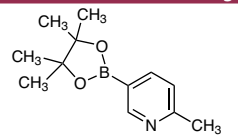
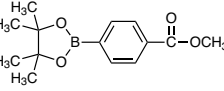
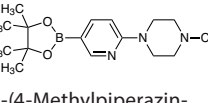
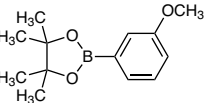
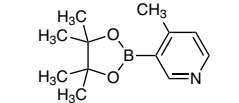
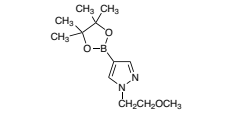
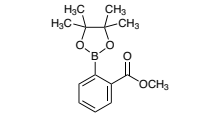
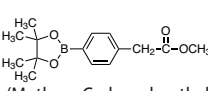
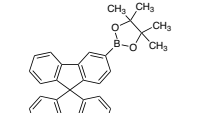
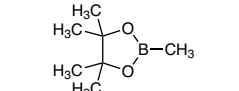
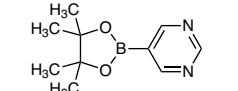
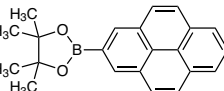
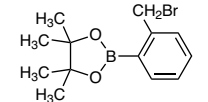
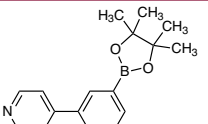
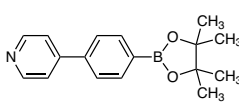
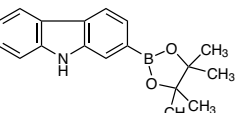
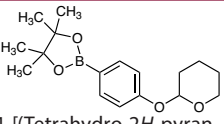
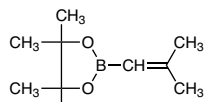
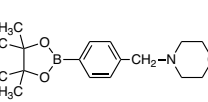
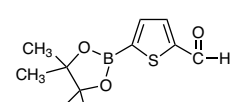
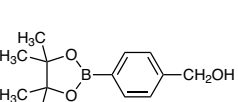
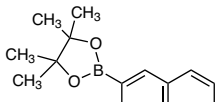
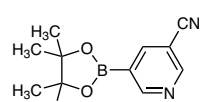
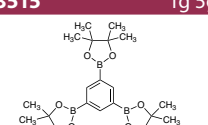
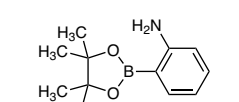
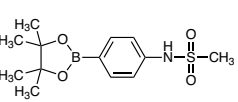
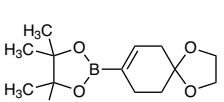
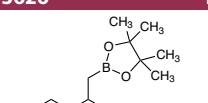
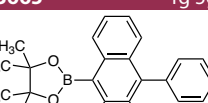
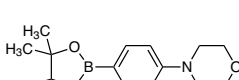
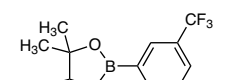
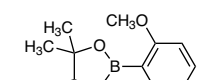


## Suzuki-Miyaura Cross Coupling Reaction

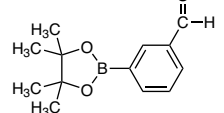
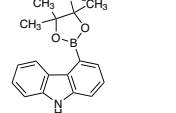
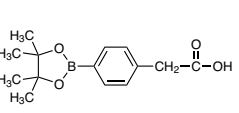
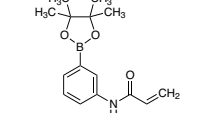
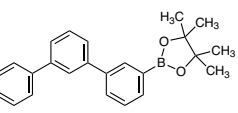
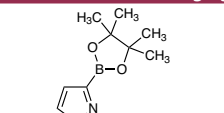
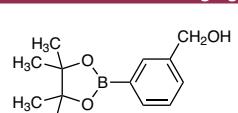
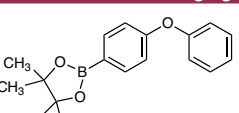
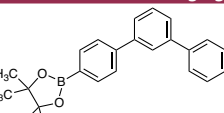
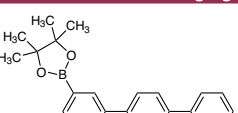
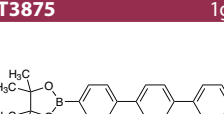
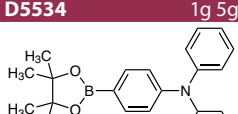
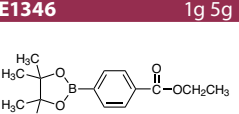
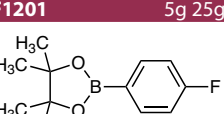
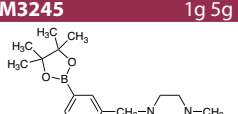
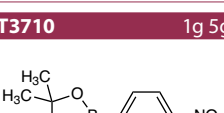
|                                                                                                                                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                     |                                                                                                                                                                                            |                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C2823</b> 1g 5g<br><br>2-Cyanophenylboronic Acid Neopentyl Glycol Ester<br>CAS RN: 214360-47-1  | <b>C2621</b> 1g 5g<br><br>2-Cyanophenylboronic Acid Pinacol Ester<br>CAS RN: 214360-48-2                               | <b>D4575</b> 1g 5g<br><br>3,5-Dichlorophenylboronic Acid Pinacol Ester<br>CAS RN: 68716-51-8       | <b>D4201</b> 1g 5g<br><br>3,5-Dichloro-4-hydroxyphenylboronic Acid Pinacol Ester<br>CAS RN: 1003298-87-0 | <b>D3601</b> 1g 5g<br><br>4-(Diethylamino)phenylboronic Acid Pinacol Ester<br>CAS RN: 920304-57-0          |
| <b>D4195</b> 5g 25g<br><br>Phenylboronic Acid Neopentyl Glycol Ester<br>CAS RN: 5123-13-7          | <b>D3533</b> 5g<br><br>3,5-Dimethylphenylboronic Acid Pinacol Ester<br>CAS RN: 325142-93-6                             | <b>D3832</b> 1g 5g<br><br>4-(Dimethylamino)phenylboronic Acid Pinacol Ester<br>CAS RN: 171364-78-6 | <b>D2853</b> 1g 5g<br><br>3-(Methoxycarbonyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 269410-25-5     | <b>E0667</b> 1g<br><br>Ethyl 2-(5,5-Dimethyl-1,3,2-dioxaborinan-2-yl)benzoate<br>CAS RN: 346656-34-6       |
| <b>F0531</b> 1g<br><br>2-Fluorophenylboronic Acid Neopentyl Glycol Ester<br>CAS RN: 346656-39-1    | <b>H1280</b> 1g 5g<br><br>2-(Hydroxymethyl)phenylboronic Acid Cyclic Monoester<br>CAS RN: 5735-41-1                    | <b>I0653</b> 1g<br><br>2-Iodophenylboronic Acid Pinacol Ester<br>CAS RN: 857934-82-8               | <b>M2665</b> 1g 5g<br><br>3-(Methoxycarbonyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 480425-35-2     | <b>N0824</b> 1g<br><br>4-Amino-3-nitrophenylboronic Acid Pinacol Ester<br>CAS RN: 833486-94-5              |
| <b>P1855</b> 5g 25g<br><br>Phenylboronic Acid Pinacol Ester<br>CAS RN: 24388-23-6                  | <b>T1950</b> 1g<br><br>4'-((4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl))acetanilide<br>CAS RN: 214360-60-8            | <b>T3028</b> 1g 5g<br><br>3-Aminophenylboronic Acid Pinacol Ester<br>CAS RN: 210907-84-9           | <b>T1951</b> 1g 5g<br><br>4-Aminophenylboronic Acid Pinacol Ester<br>CAS RN: 214360-73-3                 | <b>T3196</b> 5g 25g<br><br>4-Methoxyphenylboronic Acid Pinacol Ester<br>CAS RN: 171364-79-7                |
| <b>T2923</b> 1g 5g<br><br>4-Formylphenylboronic Acid Pinacol Ester<br>CAS RN: 128376-64-7        | <b>T3162</b> 1g 5g<br><br>3-Carboxyphenylboronic Acid Pinacol Ester<br>CAS RN: 269409-73-6                           | <b>T2841</b> 1g<br><br>4-Carboxyphenylboronic Acid Pinacol Ester<br>CAS RN: 180516-87-4          | <b>T2945</b> 1g 5g<br><br>4-(Bromomethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 138500-85-3       | <b>T3031</b> 1g 5g<br><br>(4'-Hydroxybiphenyl-4-yl)boronic Acid Pinacol Ester<br>CAS RN: 760989-91-1     |
| <b>T1952</b> 1g 5g<br><br>2-Hydroxyphenylboronic Acid Pinacol Ester<br>CAS RN: 269409-97-4       | <b>T1953</b> 1g 5g<br><br>3-Hydroxyphenylboronic Acid Pinacol Ester<br>CAS RN: 214360-76-6                           | <b>T1954</b> 1g 5g<br><br>4-Hydroxyphenylboronic Acid Pinacol Ester<br>CAS RN: 269409-70-3       | <b>T3218</b> 1g 5g<br><br>Naphthalene-1-boronic Acid Pinacol Ester<br>CAS RN: 68716-52-9               | <b>T3219</b> 1g 5g<br><br>m-Tolylboronic Acid Pinacol Ester<br>CAS RN: 253342-48-2                       |
| <b>T2888</b> 1g 5g<br><br>p-Tolylboronic Acid Pinacol Ester<br>CAS RN: 195062-57-8               | <b>T2428</b> 5g<br><br>2-[2-(Trifluoromethyl)phenyl]-4,4,5,5-tetramethyl-1,3,2-dioxaborolane<br>CAS RN: 1073339-21-5 | <b>B4771</b> 1g 5g<br><br>4-Bromophenylboronic Acid Pinacol Ester<br>CAS RN: 68716-49-4          | <b>T3103</b> 1g 5g<br><br>4-(Trifluoromethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 214360-65-3   | <b>B5095</b> 1g 5g<br><br>3,5-Bis(trifluoromethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 69807-91-6 |
| <b>C2993</b> 1g 5g<br><br>2-Cyanophenylboronic Acid 1,3-Propanediol Ester<br>CAS RN: 172732-52-4 | <b>N1006</b> 1g 5g<br><br>2-Nitrophenylboronic Acid Pinacol Ester<br>CAS RN: 190788-59-1                             | <b>T3161</b> 1g 5g<br><br>2-Formylphenylboronic Acid Pinacol Ester<br>CAS RN: 380151-85-9        | <b>T3195</b> 1g 5g<br><br>o-Tolylboronic Acid Pinacol Ester<br>CAS RN: 195062-59-0                     | <b>T3216</b> 1g<br><br>3-Acetamidophenylboronic Acid Pinacol Ester<br>CAS RN: 480424-93-9                |

|                                                                                                                                                                                                         |                                                                                                                                                                                                           |                                                                                                                                                                                        |                                                                                                                                                                                                |                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T3224</b> 1g 5g<br><br>4-Acetoxyphenylboronic Acid Pinacol Ester<br>CAS RN: 480424-70-2                             | <b>T3237</b> 1g<br><br>3-(Morpholino)phenylboronic Acid Pinacol Ester<br>CAS RN: 852227-95-3                             | <b>T3377</b> 1g 5g<br><br>3-(Trifluoromethoxy)phenylboronic Acid Pinacol Ester<br>CAS RN: 262376-31-8 | <b>B5069</b> 1g 5g<br><br>1,2-Benzenediboronic Acid Bis(pinacol) Ester<br>CAS RN: 269410-07-3                | <b>B5132</b> 1g 5g<br><br>4-Boc-phenylboronic Acid Pinacol Ester<br>CAS RN: 850568-72-8                       |
| <b>D5017</b> 1g 5g<br><br>3,5-Difluorophenylboronic Acid Pinacol Ester<br>CAS RN: 863868-36-4                          | <b>D5085</b> 1g 5g<br><br>3,4-Dimethylphenylboronic Acid Pinacol Ester<br>CAS RN: 401797-00-0                            | <b>F1085</b> 5g 25g<br><br>2-Fluorophenylboronic Acid Pinacol Ester<br>CAS RN: 876062-39-4            | <b>B4364</b> 1g 5g<br><br>1-Benzylpyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 761446-45-1               | <b>B3573</b> 1g 5g<br><br>2,1,3-Benzothiadiazole-4,7-diboronic Acid Bis(pinacol) Ester<br>CAS RN: 934365-16-9 |
| <b>B4158</b> 1g 5g<br><br>Benzo[1,2-b:4,5-b']-dithiophene-2,6-diboronic Acid Bis(pinacol) Ester<br>CAS RN: 861398-06-3 | <b>B3363</b> 5g<br><br>2,2'-Bithiophene-5,5'-diboronic Acid Bis(pinacol) Ester<br>CAS RN: 239075-02-6                    | <b>B3749</b> 1g 5g<br><br>2-Bromo-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 452972-12-2          | <b>B4051</b> 1g<br><br>1-Boc-1,2,3,6-tetrahydropyridine-4-boronic Acid Pinacol Ester<br>CAS RN: 286961-14-6  | <b>T2924</b> 1g 5g<br><br>2-Thiopheneboronic Acid Pinacol Ester<br>CAS RN: 193978-23-3                        |
| <b>D3772</b> 1g 5g<br><br>3,5-Dimethyl-4-isoxazoleboronic Acid Pinacol Ester<br>CAS RN: 832114-00-8                   | <b>H1298</b> 1g 5g 25g<br><br>3-Hexyl-2-thiopheneboronic Acid Pinacol Ester<br>CAS RN: 850881-09-3                      | <b>M2650</b> 1g 5g<br><br>6-Methoxy-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 445264-61-9       | <b>M2339</b> 1g 5g<br><br>1-Methylpyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 761446-44-0              | <b>M2681</b> 5g<br><br>1-Methylpyrazole-5-boronic Acid Pinacol Ester<br>CAS RN: 847818-74-0                  |
| <b>T2518</b> 1g 5g 25g<br><br>2,2'-Bithiophene-5-boronic Acid Pinacol Ester<br>CAS RN: 479719-88-5                   | <b>T3117</b> 1g 5g<br><br>(9H-Carbazol-3-yl)boronic Acid Pinacol Ester<br>CAS RN: 855738-89-5                          | <b>I0590</b> 1g 5g<br><br>5-Indoleboronic Acid Pinacol Ester<br>CAS RN: 269410-24-4                 | <b>I0739</b> 1g 5g<br><br>Isoquinoline-4-boronic Acid Pinacol Ester<br>CAS RN: 685103-98-4                 | <b>T2756</b> 1g 5g<br><br>4-Pyrazoleboronic Acid Pinacol Ester<br>CAS RN: 269410-08-4                       |
| <b>T2345</b> 1g 5g 25g<br><br>3-Pyridylboronic Acid Pinacol Ester<br>CAS RN: 329214-79-1                             | <b>T2349</b> 1g 5g<br><br>4-Pyridylboronic Acid Pinacol Ester<br>CAS RN: 181219-01-2                                   | <b>B5077</b> 1g 5g<br><br>6-Bromo-2-pyridylboronic Acid Pinacol Ester<br>CAS RN: 651358-83-7        | <b>M2391</b> 1g 5g<br><br>3-Methyl-2-thiopheneboronic Acid Pinacol Ester<br>CAS RN: 885692-91-1            | <b>P2277</b> 1g 5g<br><br>1-Propylpyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 827614-69-7              |
| <b>T3180</b> 1g<br><br>Quinoline-3-boronic Acid Pinacol Ester<br>CAS RN: 171364-85-5                                 | <b>T3215</b> 1g 5g<br><br>1-(Tetrahydro-2H-pyran-2-yl)-1H-pyrazole-5-boronic Acid Pinacol Ester<br>CAS RN: 903550-26-5 | <b>T3217</b> 1g<br><br>3,6-Dihydro-2H-pyran-4-boronic Acid Pinacol Ester<br>CAS RN: 287944-16-5     | <b>A2993</b> 200mg 1g<br><br>3-Amino-2-methoxypyridine-5-boronic Acid Pinacol Ester<br>CAS RN: 893440-50-1 | <b>C3126</b> 200mg 1g<br><br>6-Cyano-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 741709-63-7             |
| <b>D5184</b> 1g<br><br>1,3-Dimethylpyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 1046832-21-6                     | <b>F1026</b> 1g<br><br>5-Fluoro-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 719268-92-5                             | <b>M2647</b> 1g 5g<br><br>4-Methyl-2-thiopheneboronic Acid Pinacol Ester<br>CAS RN: 635305-48-5     | <b>T3409</b> 200mg 1g<br><br>1,3,5-Trimethylpyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 844891-04-9   | <b>T3512</b> 1g 5g<br><br>5-Oxindoleboronic Acid Pinacol Ester<br>CAS RN: 837392-64-0                       |

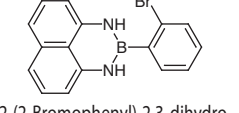
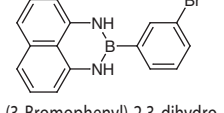
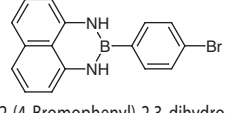
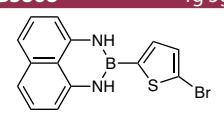
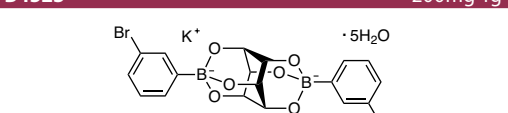
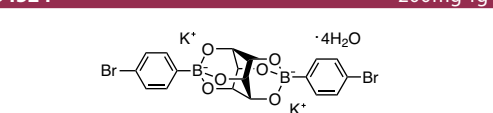
|                                                                                                                                                                                                                    |                                                                                                                                                                                                                      |                                                                                                                                                                                                    |                                                                                                                                                                                                           |                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>T3582</b> 1g 5g</p>  <p>(5-Methylfuran-2-yl)-boronic Acid Pinacol Ester<br/>CAS RN: 338998-93-9</p>                         | <p><b>T3668</b> 200mg 1g</p>  <p>1-(Tetrahydro-2H-pyran-4-yl)-1H-pyrazole-4-boronic Acid Pinacol Ester<br/>CAS RN: 1040377-03-4</p> | <p><b>A3087</b> 1g 5g</p>  <p>2-Aminopyrimidine-5-boronic Acid Pinacol Ester<br/>CAS RN: 402960-38-7</p>          | <p><b>A3184</b> 1g 5g</p>  <p>2-(9-Anthryl)-4,4,5-tetramethyl-1,3,2-dioxaborolane<br/>CAS RN: 709022-63-9</p>           | <p><b>B4561</b> 1g</p>  <p>Acetylene-1,2-diyl Bis(boronic Acid Pinacol Ester)<br/>CAS RN: 1010840-17-1</p>             |
| <p><b>B5157</b> 1g 5g</p>  <p>9,9-Dimethylfluorene-2,7-diboronic Acid Bis(pinacol) Ester<br/>CAS RN: 325129-69-9</p>              | <p><b>B5203</b> 1g 5g</p>  <p>1-Boc-pyrazolyl-4-boronic Acid Pinacol Ester<br/>CAS RN: 552846-17-0</p>                              | <p><b>B5238</b> 1g</p>  <p>9,9-Dimethylfluorene-2,7-diboronic Acid Bis(pinacol) Ester<br/>CAS RN: 458532-82-6</p> | <p><b>B5288</b> 1g</p>  <p>2,7-Naphthalenediboronic Acid Bis(pinacol) Ester<br/>CAS RN: 853377-10-3</p>                 | <p><b>B5588</b> 1g 5g</p>  <p>4-(Boc-amino)phenylboronic Acid Pinacol Ester<br/>CAS RN: 330793-01-6</p>                |
| <p><b>B5703</b> 200mg 1g</p>  <p>2,2'-Biphenyldiboronic Acid Bis(pinacol) Ester<br/>CAS RN: 398128-09-1</p>                       | <p><b>B5704</b> 200mg 1g</p>  <p>3,3'-Biphenyldiboronic Acid Bis(pinacol) Ester<br/>CAS RN: 850264-92-5</p>                         | <p><b>B5823</b> 250mg 1g</p>  <p>Benzofuran-5-boronic Acid Pinacol Ester<br/>CAS RN: 519054-55-8</p>              | <p><b>B5844</b> 200mg 1g</p>  <p>1-Boc-5,6-Dihydro-2H-pyridine-3-boronic Acid Pinacol Ester<br/>CAS RN: 885693-20-9</p> | <p><b>B5871</b> 1g 5g</p>  <p>Thiophene-2,5-diboronic Acid Bis(pinacol) Ester<br/>CAS RN: 175361-81-6</p>              |
| <p><b>B5960</b> 1g 5g</p>  <p>(3-Buten-1-yl)boronic Acid Pinacol Ester<br/>CAS RN: 331958-92-0</p>                               | <p><b>B6023</b> 1g 5g</p>  <p>3-Biphenylboronic Acid Pinacol Ester<br/>CAS RN: 912844-88-3</p>                                     | <p><b>B6024</b> 1g 5g</p>  <p>3-Bromophenylboronic Acid Pinacol Ester<br/>CAS RN: 594823-67-3</p>                | <p><b>B6026</b> 200mg 1g</p>  <p>1-Boc-3,5-dimethylpyrazole-4-boronic Acid Pinacol Ester<br/>CAS RN: 1073354-70-7</p>  | <p><b>B6050</b> 1g</p>  <p>1,4-Benzenediboronic Acid Bis(neopentyl Glycol) Ester<br/>CAS RN: 5565-36-6</p>            |
| <p><b>C3243</b> 1g 5g</p>  <p>1-Cbz-1,2,3,6-tetrahydropyridine-4-boronic Acid Pinacol Ester<br/>CAS RN: 286961-15-7</p>         | <p><b>C3301</b> 1g 5g</p>  <p>5-Chloro-2-thiopheneboronic Acid Pinacol Ester<br/>CAS RN: 635305-24-7</p>                          | <p><b>C3367</b> 200mg 1g</p>  <p>5-Chloropyridine-3-boronic Acid Pinacol Ester<br/>CAS RN: 865186-94-3</p>      | <p><b>C3385</b> 1g 5g</p>  <p>1-Cyclopenteneboronic Acid Pinacol Ester<br/>CAS RN: 287944-10-9</p>                    | <p><b>C3436</b> 1g 5g</p>  <p>2-Chloropyrimidine-5-boronic Acid Pinacol Ester<br/>CAS RN: 1003845-08-6</p>           |
| <p><b>C3500</b> 5g 25g</p>  <p>4-Chlorophenylboronic Acid Pinacol Ester<br/>CAS RN: 195062-61-4</p>                             | <p><b>C3529</b> 1g 5g</p>  <p>2-Chloropyridine-4-boronic Acid Pinacol Ester<br/>CAS RN: 458532-84-8</p>                           | <p><b>C3612</b> 1g 5g</p>  <p>2-Chlorophenylboronic Acid Pinacol Ester<br/>CAS RN: 870195-94-1</p>              | <p><b>D5142</b> 200mg 1g</p>  <p>2,6-Difluoropyridine-3-boronic Acid Pinacol Ester<br/>CAS RN: 1072945-00-6</p>       | <p><b>D5239</b> 1g 5g</p>  <p>3,5-Bis(methoxycarbonyl)-benzeneboronic Acid Pinacol Ester<br/>CAS RN: 944392-68-1</p> |
| <p><b>D5360</b> 1g 5g</p>  <p>3,5-Dimethoxyphenylboronic Acid Pinacol Ester<br/>CAS RN: 365564-07-4</p>                         | <p><b>D5431</b> 200mg 1g</p>  <p>3,5-Dinitrophenylboronic Acid Pinacol Ester<br/>CAS RN: 428820-95-5</p>                          | <p><b>D5533</b> 1g 5g</p>  <p>3,4-Dimethoxyphenylboronic Acid Pinacol Ester<br/>CAS RN: 365564-10-9</p>         | <p><b>D5574</b> 1g 5g</p>  <p>2,6-Dichloropyridine-4-boronic Acid Pinacol Ester<br/>CAS RN: 408492-27-3</p>           | <p><b>D5575</b> 200mg 1g</p>  <p>1,5-Dimethyl-1H-pyrazole-4-boronic Acid Pinacol Ester<br/>CAS RN: 1036991-40-8</p>  |
| <p><b>D5591</b> 1g 5g</p>  <p>3-(4,6-Diphenyl-1,3,5-triazine-2-yl)phenylboronic Acid Pinacol Ester<br/>CAS RN: 1269508-31-7</p> | <p><b>E1295</b> 1g</p>  <p>5-(2-Ethylhexyl)-2-thiopheneboronic Acid Pinacol Ester<br/>CAS RN: 1390584-88-9</p>                    | <p><b>E1311</b> 1g 5g</p>  <p>2-Ethoxycarbonylphenylboronic Acid Pinacol Ester<br/>CAS RN: 269409-99-6</p>      | <p><b>E1348</b> 1g 5g</p>  <p>1-Ethyl-1H-pyrazole-4-boronic Acid Pinacol Ester<br/>CAS RN: 847818-70-6</p>            | <p><b>E1393</b> 1g</p>  <p>4-(Ethoxycarbonylmethyl)phenylboronic Acid Pinacol Ester<br/>CAS RN: 859169-20-3</p>      |

|                                                                                                                                                                                                      |                                                                                                                                                                                               |                                                                                                                                                                                       |                                                                                                                                                                                                   |                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>F1094</b> 1g 5g<br><br>6-Fluoropyridine-3-boronic Acid Pinacol Ester<br>CAS RN: 444120-95-0                      | <b>F1105</b> 1g 5g<br><br>2-Fluoropyridine-3-boronic Acid Pinacol Ester<br>CAS RN: 452972-14-4               | <b>F1245</b> 5g 25g<br><br>9H-Fluorene-2-boronic Acid Pinacol Ester<br>CAS RN: 922706-40-9           | <b>I1085</b> 250mg 1g<br><br>1-Isopropyl-1H-pyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 879487-10-2        | <b>I1099</b> 200mg 1g<br><br>6-Isopropoxy-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 871839-91-7                 |
| <b>I1109</b> 1g<br><br>Isopropylboronic Acid Pinacol Ester<br>CAS RN: 76347-13-2                                    | <b>M2867</b> 1g 5g<br><br>2-Methylpyridine-4-boronic Acid Pinacol Ester<br>CAS RN: 660867-80-1               | <b>M2994</b> 1g<br><br>3-Methoxypyridine-5-boronic Acid Pinacol Ester<br>CAS RN: 445264-60-8         | <b>M3020</b> 1g<br><br>6-Methyl-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 610768-32-6                      | <b>M3057</b> 1g 5g<br><br>4-(Methoxycarbonyl)-phenylboronic Acid Pinacol Ester<br>CAS RN: 171364-80-0                |
| <b>M3116</b> 200mg 1g<br><br>6-(4-Methylpiperazin-1-yl)pyridine-3-boronic Acid Pinacol Ester<br>CAS RN: 918524-63-7 | <b>M3124</b> 1g 5g<br><br>3-Methoxyphenylboronic Acid Pinacol Ester<br>CAS RN: 325142-84-5                   | <b>M3231</b> 1g 5g<br><br>4-Methyl-3-pyridylboronic Acid Pinacol Ester<br>CAS RN: 1171891-31-8       | <b>M3232</b> 200mg 1g<br><br>1-(2-Methoxyethyl)-1H-pyrazole-4-boronic Acid Pinacol Ester<br>CAS RN: 847818-71-7 | <b>M3233</b> 1g 5g<br><br>2-(Methoxycarbonyl)-phenylboronic Acid Pinacol Ester<br>CAS RN: 653589-95-8                |
| <b>M3236</b> 1g 5g<br><br>4-(Methoxycarbonylmethyl)-phenylboronic Acid Pinacol Ester<br>CAS RN: 454185-98-9        | <b>P2562</b> 200mg 1g<br><br>(9,9'-Spiro[fluorene]-3-yl)-boronic Acid Pinacol Ester<br>CAS RN: 1346007-05-3 | <b>P2602</b> 1g 5g<br><br>2,4,4,5,5-Pentamethyl-1,3,2-dioxaborolane<br>CAS RN: 94242-85-0           | <b>T2521</b> 1g 5g<br><br>5-Pyrimidylboronic Acid Pinacol Ester<br>CAS RN: 321724-19-0                         | <b>T3150</b> 1g 5g<br><br>2-Pyreneboronic Acid Pinacol Ester<br>CAS RN: 853377-11-4                                 |
| <b>T3393</b> 1g 5g<br><br>2-(Bromomethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 377780-72-8                  | <b>T3399</b> 200mg 1g<br><br>3-(4-Pyridyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 1009033-83-3         | <b>T3400</b> 200mg 1g<br><br>4-(4-Pyridyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 1009033-87-7 | <b>T3441</b> 1g 5g<br><br>(9H-Carbazol-2-yl)boronic Acid Pinacol Ester<br>CAS RN: 1242412-60-7                | <b>T3468</b> 1g 5g<br><br>4-[(Tetrahydro-2H-pyran-2-yl)oxy]phenylboronic Acid Pinacol Ester<br>CAS RN: 889865-38-7 |
| <b>T3469</b> 1g 5g<br><br>(2-Methyl-1-propenyl)-boronic Acid Pinacol Ester<br>CAS RN: 126689-00-7                 | <b>T3477</b> 1g 5g<br><br>4-(Morpholinomethyl)-phenylboronic Acid Pinacol Ester<br>CAS RN: 364794-79-6     | <b>T3485</b> 1g 5g<br><br>5-Formyl-2-thiopheneboronic Acid Pinacol Ester<br>CAS RN: 1040281-83-1   | <b>T3496</b> 1g 5g<br><br>4-(Hydroxymethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 302348-51-2            | <b>T3507</b> 1g<br><br>Quinoline-6-boronic Acid Pinacol Ester<br>CAS RN: 406463-06-7                               |
| <b>T3514</b> 200mg 1g<br><br>3-Cyanopyridine-5-boronic Acid Pinacol Ester<br>CAS RN: 402718-29-0                  | <b>T3515</b> 1g 5g<br><br>1,3,5-Phenyltriboronic Acid Tris(pinacol) Ester<br>CAS RN: 365564-05-2           | <b>T3543</b> 1g 5g<br><br>2-Aminophenylboronic Acid Pinacol Ester<br>CAS RN: 191171-55-8           | <b>T3557</b> 1g 5g<br><br>4-(Methanesulfonylamino)-phenylboronic Acid Pinacol Ester<br>CAS RN: 616880-14-9    | <b>T3566</b> 250mg 1g<br><br>1,4-Dioxaspiro[4,5]dec-7-en-8-boronic Acid Pinacol Ester<br>CAS RN: 680596-79-6       |
| <b>T3626</b> 1g<br><br>(Naphthalen-1-ylmethyl)-boronic Acid Pinacol Ester<br>CAS RN: 475250-57-8                  | <b>T3665</b> 1g 5g<br><br>10-Phenylanthracene-9-boronic Acid Pinacol Ester<br>CAS RN: 460347-59-5          | <b>T3705</b> 1g 5g<br><br>4-Morpholinophenylboronic Acid Pinacol Ester<br>CAS RN: 568577-88-8      | <b>T3707</b> 5g 25g<br><br>3-(Trifluoromethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 325142-82-3         | <b>T3708</b> 5g 25g<br><br>2-Methoxyphenylboronic Acid Pinacol Ester<br>CAS RN: 190788-60-4                        |

## Suzuki-Miyaura Cross Coupling Reaction

|                                                                                                                                                                                       |                                                                                                                                                                                     |                                                                                                                                                                                        |                                                                                                                                                                                              |                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T3709</b> 5g 25g<br><br>3-Formylphenylboronic Acid Pinacol Ester<br>CAS RN: 380151-86-0           | <b>T3747</b> 1g<br><br>(9H-Carbazol-4-yl)boronic Acid Pinacol Ester<br>CAS RN: 1255309-13-7        | <b>T3754</b> 200mg 1g<br><br>4-(Carboxymethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 797755-07-8 | <b>T3826</b> 1g 5g<br><br>3-Acrylamidophenylboronic Acid Pinacol Ester<br>CAS RN: 874363-18-5              | <b>T3828</b> 250mg 1g<br><br>(1,1':3,1''-Terphenyl)-3-ylboronic Acid Pinacol Ester<br>CAS RN: 1115023-84-1         |
| <b>T3829</b> 1g 5g<br><br>1H-Pyrazole-3-boronic Acid Pinacol Ester<br>CAS RN: 844501-71-9            | <b>T3830</b> 1g 5g<br><br>3-(Hydroxymethyl)phenylboronic Acid Pinacol Ester<br>CAS RN: 443776-76-9 | <b>T3831</b> 1g 5g<br><br>Phenoxyphenyl-4-boronic Acid Pinacol Ester<br>CAS RN: 269410-26-6           | <b>T3873</b> 200mg 1g<br><br>(1,1':3,1''-Terphenyl)-4-ylboronic Acid Pinacol Ester<br>CAS RN: 1385826-84-5 | <b>T3874</b> 1g 5g<br><br>(1,1':4,1''-Terphenyl)-3-ylboronic Acid Pinacol Ester<br>CAS RN: 1401577-23-8            |
| <b>T3875</b> 1g<br><br>(1,1':4,1''-Terphenyl)-4-ylboronic Acid Pinacol Ester<br>CAS RN: 1080632-76-3 | <b>D5534</b> 1g 5g<br><br>Triphenylamine-4-boronic Acid Pinacol Ester<br>CAS RN: 267221-88-5       | <b>E1346</b> 1g 5g<br><br>4-Ethoxycarbonylphenylboronic Acid Pinacol Ester<br>CAS RN: 195062-62-5     | <b>F1201</b> 5g 25g<br><br>4-Fluorophenylboronic Acid Pinacol Ester<br>CAS RN: 214360-58-4                 | <b>M3245</b> 1g 5g<br><br>3-(4-Methyl-1-piperazinylmethyl)benzeneboronic Acid Pinacol Ester<br>CAS RN: 883738-27-0 |
| <b>T3710</b> 1g 5g<br><br>4-Nitrophenylboronic Acid Pinacol Ester<br>CAS RN: 171364-83-3             |                                                                                                                                                                                     |                                                                                                                                                                                        |                                                                                                                                                                                              |                                                                                                                                                                                                       |

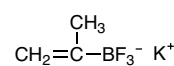
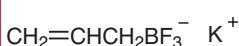
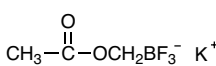
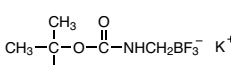
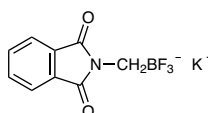
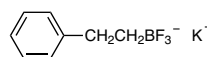
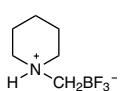
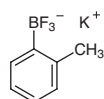
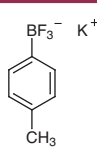
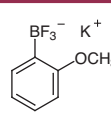
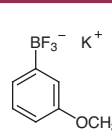
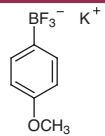
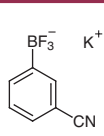
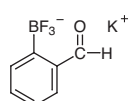
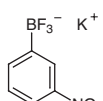
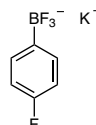
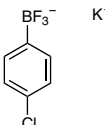
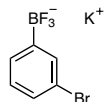
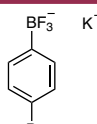
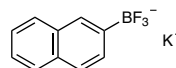
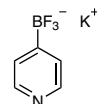
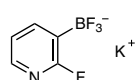
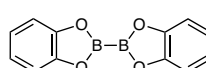
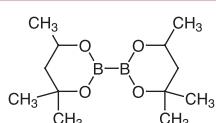
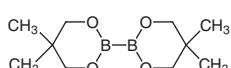
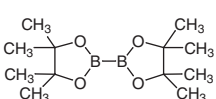
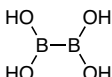
## Protected Boronic Acids

|                                                                                                                                                                                                             |                                                                                                                                                                                                                         |                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>B3653</b> 1g 5g<br><br>2-(2-Bromophenyl)-2,3-dihydro-1H-naphtho[1,8-de][1,3,2]-diazaborine<br>CAS RN: 927384-42-7     | <b>B3654</b> 1g 5g<br><br>2-(3-Bromophenyl)-2,3-dihydro-1H-naphtho[1,8-de][1,3,2]-diazaborine<br>CAS RN: 927384-43-8                | <b>B3655</b> 1g 5g<br><br>2-(4-Bromophenyl)-2,3-dihydro-1H-naphtho[1,8-de][1,3,2]-diazaborine<br>CAS RN: 927384-44-9                |
| <b>B3868</b> 1g 5g<br><br>2-(5-Bromo-2-thienyl)-2,3-dihydro-1H-naphtho[1,8-de][1,3,2]-diazaborine<br>CAS RN: 927384-46-1 | <b>B4523</b> 200mg 1g<br><br>Bis(3-bromophenylboronic Acid) scyllo-Inositol Complex Dipotassium Pentahydrate<br>CAS RN: 1537876-31-5 | <b>B4524</b> 200mg 1g<br><br>Bis(4-bromophenylboronic Acid) scyllo-Inositol Complex Dipotassium Tetrahydrate<br>CAS RN: 1537876-29-1 |

## Trifluoroborate Salts

|                                                                                                                               |                                                                                                                                          |                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>P1478</b> 1g 5g<br>$\text{CH}_3\text{BF}_3^- \text{K}^+$<br>Potassium Trifluoro(methyl)-borate<br>CAS RN: 13862-28-7       | <b>P1692</b> 1g 5g 25g<br>$\text{CF}_3\text{BF}_3^- \text{K}^+$<br>Potassium Trifluoro(trifluoro-methyl)borate<br>CAS RN: 42298-15-7     | <b>P1807</b> 1g 5g<br>$\text{BrCH}_2\text{BF}_3^- \text{K}^+$<br>Potassium (Bromomethyl)-trifluoroborate<br>CAS RN: 888711-44-2            |
| <b>P1808</b> 1g 5g<br>$\text{ICH}_2\text{BF}_3^- \text{K}^+$<br>Potassium (Iodomethyl)-trifluoroborate<br>CAS RN: 888711-47-5 | <b>P2153</b> 1g<br>$\text{CH}_3\text{OCH}_2\text{BF}_3^- \text{K}^+$<br>Potassium (Methoxymethyl)-trifluoroborate<br>CAS RN: 910251-11-5 | <b>P2626</b> 1g 5g<br>$\text{CH}_3\text{CH}_2\text{BF}_3^- \text{K}^+$<br>Potassium Ethyltrifluoroborate<br>CAS RN: 882871-21-8            |
| <b>P1479</b> 1g 5g 25g<br>$\text{CH}_2=\text{CHBF}_3^- \text{K}^+$<br>Potassium Vinyltrifluoroborate<br>CAS RN: 13682-77-4    | <b>P2628</b> 1g 5g<br>$\text{CH}_3\text{CH}_2\text{BF}_3^- \text{K}^+$<br>Potassium Ethyltrifluoroborate<br>CAS RN: 882871-21-8          | <b>P2626</b> 1g 5g<br>$\text{CH}_3\text{CH}_2\text{CH}_2\text{BF}_3^- \text{K}^+$<br>Potassium Butyltrifluoroborate<br>CAS RN: 444343-55-9 |

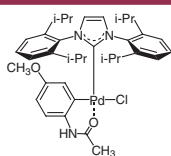


|                                                                                                                                                                                                  |                                                                                                                                                                                               |                                                                                                                                                                                               |                                                                                                                                                                                                  |                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>P2456</b> 1g 5g<br><div></div> <p>Potassium Isopropenyltrifluoroborate<br/>CAS RN: 395083-14-4</p>           | <b>P1480</b> 1g 5g<br><div></div> <p>Potassium Allyltrifluoroborate<br/>CAS RN: 233664-53-4</p>              | <b>P1846</b> 1g 5g<br><div></div> <p>Potassium Cyclopropyltrifluoroborate<br/>CAS RN: 1065010-87-8</p>       | <b>P2494</b> 1g 5g<br><div></div> <p>Potassium (Acetoxymethyl)-trifluoroborate<br/>CAS RN: 910251-35-3</p>     | <b>P2155</b> 1g 5g<br><div></div> <p>Potassium [(<i>tert</i>-Butoxycarbonyl)-amino]methyl]trifluoroborate<br/>CAS RN: 1314538-55-0</p> |
| <b>P2514</b> 1g 5g<br><div></div> <p>Potassium (Phthalimidomethyl)-trifluoroborate<br/>CAS RN: 1001671-72-2</p> | <b>P1581</b> 1g 5g<br><div></div> <p>Potassium Trifluoro(2-phenylethyl)borate<br/>CAS RN: 329976-74-1</p>    | <b>P2287</b> 1g<br><div></div> <p>(Piperidinium-1-ylmethyl)-trifluoroborate<br/>CAS RN: 1268340-93-7</p>     | <b>P1582</b> 1g 5g 25g<br><div></div> <p>Potassium Phenyltrifluoroborate<br/>CAS RN: 153766-81-5</p>          | <b>P1818</b> 1g 5g<br><div></div> <p>Potassium o-Tolyltrifluoroborate<br/>CAS RN: 274257-34-0</p>                                      |
| <b>P1583</b> 1g 5g<br><div></div> <p>Potassium p-Tolyltrifluoroborate<br/>CAS RN: 216434-82-1</p>               | <b>P1810</b> 1g 5g<br><div></div> <p>Potassium (2-Methoxyphenyl)-trifluoroborate<br/>CAS RN: 236388-46-8</p> | <b>P1580</b> 1g 5g<br><div></div> <p>Potassium (3-Methoxyphenyl)-trifluoroborate<br/>CAS RN: 438553-44-7</p> | <b>P1820</b> 1g 5g<br><div></div> <p>Potassium (4-Methoxyphenyl)-trifluoroborate<br/>CAS RN: 192863-36-8</p>  | <b>P1814</b> 5g<br><div></div> <p>Potassium (3-Cyanophenyl)-trifluoroborate<br/>CAS RN: 850623-46-0</p>                                |
| <b>P1812</b> 1g<br><div></div> <p>Potassium (2-Formylphenyl)-trifluoroborate<br/>CAS RN: 192863-39-1</p>       | <b>P1819</b> 1g 5g<br><div></div> <p>Potassium (3-Nitrophenyl)-trifluoroborate<br/>CAS RN: 192863-40-4</p>  | <b>P1465</b> 1g<br><div></div> <p>Potassium (4-Fluorophenyl)-trifluoroborate<br/>CAS RN: 192863-35-7</p>    | <b>P2654</b> 5g 25g<br><div></div> <p>Potassium (4-Chlorophenyl)-trifluoroborate<br/>CAS RN: 661465-44-7</p> | <b>P2646</b> 1g 5g<br><div></div> <p>Potassium (3-Bromophenyl)-trifluoroborate<br/>CAS RN: 374564-34-8</p>                            |
| <b>P2647</b> 1g 5g<br><div></div> <p>Potassium (4-Bromophenyl)-trifluoroborate<br/>CAS RN: 374564-35-9</p>    | <b>P2655</b> 5g 25g<br><div></div> <p>Potassium 2-Naphthalenyltrifluoroborate<br/>CAS RN: 668984-08-5</p>  | <b>P1717</b> 1g 5g<br><div></div> <p>Potassium 3-Pyridyltrifluoroborate<br/>CAS RN: 561328-69-6</p>        | <b>P1684</b> 1g 5g<br><div></div> <p>Potassium 4-Pyridyltrifluoroborate<br/>CAS RN: 1111732-87-6</p>        | <b>P2675</b> 1g 5g<br><div></div> <p>Potassium 2-Fluoropyridine-3-trifluoroborate<br/>CAS RN: 1111732-91-2</p>                       |
| <div><div>Diboronic Acid /<br/>Diboronic Acid Esters</div></div>                                                                                                                                 |                                                                                                                                                                                               |                                                                                                                                                                                               |                                                                                                                                                                                                  |                                                                                                                                                                                                                           |
| <b>B3757</b> 1g 5g<br><div></div> <p>Bis(catecholato)diboron<br/>CAS RN: 13826-27-2</p>                       | <b>B2906</b> 1g 5g<br><div></div> <p>Bis(hexylene Glycolato)-diboron<br/>CAS RN: 230299-21-5</p>          | <b>B2254</b> 1g 5g 25g<br><div></div> <p>Bis(neopentyl Glycolato)-diboron<br/>CAS RN: 201733-56-4</p>    |                                                                                                                                                                                                  |                                                                                                                                                                                                                           |
| <b>B1964</b> 1g 5g 25g 100g<br><div></div> <p>Bis(pinacolato)diboron<br/>CAS RN: 73183-34-3</p>               | <b>T2953</b> 5g 25g<br><div></div> <p>Tetrahydroxydiboron<br/>CAS RN: 13675-18-8</p>                       |                                                                                                                                                                                               |                                                                                                                                                                                                  |                                                                                                                                                                                                                           |
| <div><div>Palladium Catalysts</div></div>                                                                                                                                                        |                                                                                                                                                                                               |                                                                                                                                                                                               |                                                                                                                                                                                                  |                                                                                                                                                                                                                           |
| <b>P1490</b> 5g 25g<br><div><div>Pd</div><p>Palladium 5% on Carbon (wetted with ca. 55% Water)<br/>CAS RN: 7440-05-3</p></div>                                                                   | <b>P1491</b> 5g 25g<br><div><div>Pd</div><p>Palladium 10% on Carbon (wetted with ca. 55% Water)<br/>CAS RN: 7440-05-3</p></div>                                                               | <b>P1785</b> 5g 25g<br><div><div>Pd</div><p>Palladium 10% on Carbon (wetted with ca. 55% Water)<br/>CAS RN: 7440-05-3</p></div>                                                               |                                                                                                                                                                                                  |                                                                                                                                                                                                                           |

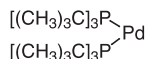
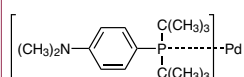
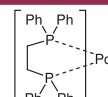
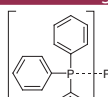
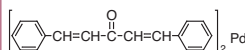
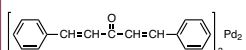


## Suzuki-Miyaura Cross Coupling Reaction

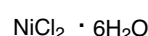
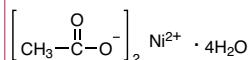
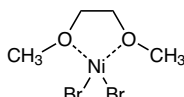
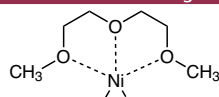
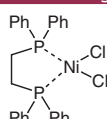
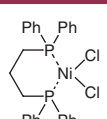
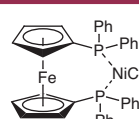
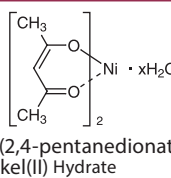
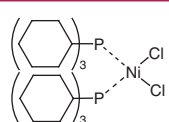
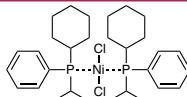
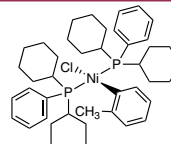
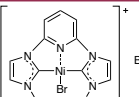
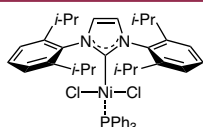
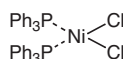
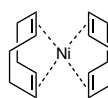
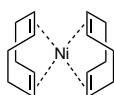
|                                                                                                                                              |                                                                                                                             |                                                                                                                                              |                                                                                                                                    |                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>P2238</b> 5g 25g<br><br>Palladium 5% on Alumina<br>CAS RN: 7440-05-3                                                                      | <b>P1528</b> 10g 50g<br><br>Palladium Hydroxide<br>20% on Carbon (wetted with<br>ca. 50% Water)<br>CAS RN: 12135-22-7       | <b>A1424</b> 1g 5g<br><br>Palladium(II) Acetate<br>CAS RN: 3375-31-3                                                                         | <b>P2161</b> 1g<br><br>Palladium(II) Acetate<br>(Purified)<br>CAS RN: 3375-31-3                                                    | <b>P2106</b> 1g 5g<br><br>Palladium(II) Acetate<br>Trimer<br>CAS RN: 53189-26-7                                                |
| <b>P1870</b> 1g 5g<br><br>Palladium(II) Trifluoroacetate<br>CAS RN: 42196-31-6                                                               | <b>P1489</b> 1g 5g<br><br>Palladium(II) Chloride<br>CAS RN: 7647-10-1                                                       | <b>S0540</b> 1g<br><br>Sodium Tetrachloro-<br>palladate(II)<br>CAS RN: 13820-53-6                                                            | <b>B1676</b> 1g 5g<br><br>Bis(acetonitrile)palladium(II)<br>Dichloride<br>CAS RN: 14592-56-4                                       | <b>T3023</b> 1g<br><br>Tetrakis(acetonitrile)-<br>palladium(II) Ditriflate<br>CAS RN: 68569-14-2                               |
| <b>B1668</b> 1g 5g<br><br>Bis(benzonitrile)palladium(II)<br>Dichloride<br>CAS RN: 14220-64-5                                                 | <b>A1479</b> 500mg 1g<br><br>Allylpalladium(II) Chloride<br>Dimer<br>CAS RN: 12012-95-2                                     | <b>P2017</b> 200mg<br><br>Palladium(II)( $\pi$ -cinnamyl)<br>Chloride Dimer<br>CAS RN: 12131-44-1                                            | <b>D3704</b> 100mg<br><br>[Di-tert-butyl(chloro)phosphine]-<br>palladium(II) Dichloride Dimer<br>CAS RN: 386706-33-8               | <b>D3706</b> 100mg<br><br>Dihydrogen Di- $\mu$ -chlorotetrakis(di-<br>tert-butylphosphinito)dipalladate<br>CAS RN: 386706-31-6 |
| <b>D4191</b> 1g<br><br>Di- $\mu$ -chlorobis(2'-amino-1,1'-<br>biphenyl-2-yl-C,N)dipalladium(II)<br>CAS RN: 847616-85-7                       | <b>C2734</b> 1g<br><br>Chloro[(tri-tert-butylphosphine)-<br>2-(2-aminobiphenyl)]<br>palladium(II)<br>CAS RN: 1375325-71-5   | <b>D3806</b> 250mg 1g<br><br>Najera Catalyst I<br>CAS RN: 287410-78-0                                                                        | <b>D3807</b> 250mg 1g<br><br>Najera Catalyst II<br>CAS RN: 419581-64-9                                                             | <b>D3847</b> 1g<br><br>Di- $\mu$ -chlorobis[2-[(dimethylamino)-<br>methyl]phenyl-C,N]dipalladium(II)<br>CAS RN: 18987-59-2     |
| <b>D4112</b> 1g<br><br>Di- $\mu$ -chlorobis[2-[(dimethylamino)-<br>methyl]-4,6-dimethoxyphenyl-<br>C,N]dipalladium(II)<br>CAS RN: 18987-71-8 | <b>B2016</b> 1g 5g<br><br>[1,2-Bis(diphenylphosphino)-<br>ethane]palladium(II)<br>Dichloride<br>CAS RN: 19978-61-1          | <b>B2192</b> 1g 5g<br><br>[1,3-Bis(diphenylphosphino)-<br>propane]palladium(II)<br>Dichloride<br>CAS RN: 59831-02-6                          | <b>B2031</b> 1g 5g<br><br>[1,4-Bis(diphenylphosphino)-<br>butane]palladium(II)<br>Dichloride<br>CAS RN: 29964-62-3                 | <b>B2055</b> 1g 5g<br><br>Bis(tricyclohexylphosphine)-<br>palladium(II) Dichloride<br>CAS RN: 29934-17-6                       |
| <b>B2161</b> 1g 5g<br><br>Bis(methyldiphenyl-<br>phosphine)palladium(II)<br>Dichloride<br>CAS RN: 52611-08-2                                 | <b>B1667</b> 1g 5g 25g<br><br>Bis(triphenylphosphine)-<br>palladium(II) Dichloride<br>CAS RN: 13965-03-2                    | <b>B2026</b> 1g 5g<br><br>Bis(tri-o-tolylphosphine)-<br>palladium(II) Dichloride<br>CAS RN: 40691-33-6                                       | <b>B2029</b> 100mg 1g<br><br>Benzylbis(triphenyl-<br>phosphine)palladium(II)<br>Chloride<br>CAS RN: 22784-59-4                     | <b>B2042</b> 1g 5g<br><br>Bis(triphenylphosphine)-<br>palladium(II) Diacetate<br>CAS RN: 14588-08-0                            |
| <b>D2604</b> 1g 5g<br><br>Dichloro(1,5-cycloocta-<br>diene)palladium(II)<br>CAS RN: 12107-56-1                                               | <b>B3160</b> 1g 5g<br><br>[1,1'-Bis(di-tert-butylphosphino)-<br>ferrocene]palladium(II)<br>Dichloride<br>CAS RN: 95408-45-0 | <b>B2064</b> 1g 5g 25g<br><br>[1,1'-Bis(diphenylphosphino)ferrocene]palladium(II)<br>Dichloride Dichloromethane Adduct<br>CAS RN: 95464-05-4 | <b>D4333</b> 200mg 1g<br><br>Dichloro[9,9-dimethyl-<br>4,5-bis(diphenylphosphino)-<br>xanthen]palladium(II)<br>CAS RN: 205319-10-4 |                                                                                                                                |
| <b>B2018</b> 1g 5g<br><br>Bis(2,4-pentanedionato)-<br>palladium(II)<br>CAS RN: 14024-61-4                                                    | <b>B6199</b> 1g 5g 25g<br><br>Organ's Catalyst<br>CAS RN: 905459-27-0                                                       | <b>C2372</b> 200mg 1g<br><br>SingaCycle™-A1<br>CAS RN: 930796-10-4                                                                           | <b>C2406</b> 200mg 1g<br><br>SingaCycle™-A2<br>CAS RN: 1093348-08-3                                                                | <b>C2387</b> 200mg 1g<br><br>SingaCycle™-A3<br>CAS RN: 1228009-69-5                                                            |

**C2407** 200mg 1g

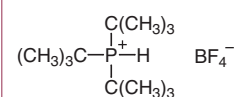
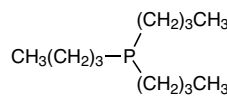
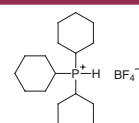
SingaCycle™-A4

**B3161** 250mg 1gBis(tri-*tert*-butylphosphine)palladium(0)  
CAS RN: 53199-31-8**B4837** 500mgBis[di-*tert*-butyl(4dimethylaminophenyl)phosphine]palladium(0)  
CAS RN: 1233717-68-4**B3224** 1g 5gBis[1,2-bis(diphenylphosphino)ethane]palladium(0)  
CAS RN: 31277-98-2**T1350** 1g 5g 25gTetrakis(triphenylphosphine)palladium(0)  
CAS RN: 14221-01-3**B1374** 1g 5gBis(dibenzylideneacetone)palladium(0)  
CAS RN: 32005-36-0**T2184** 1g 5gTris(dibenzylideneacetone)dipalladium(0)  
CAS RN: 51364-51-3

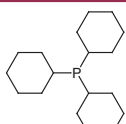
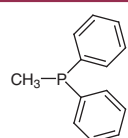
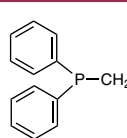
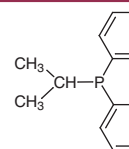
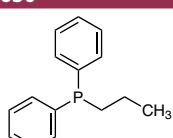
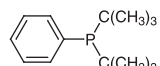
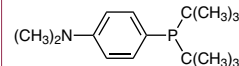
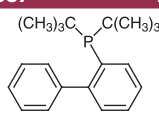
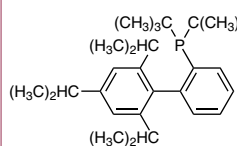
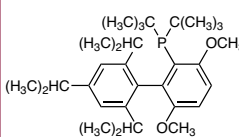
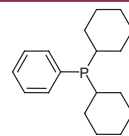
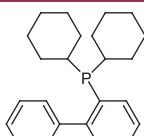
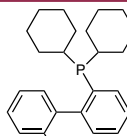
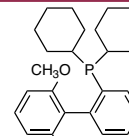
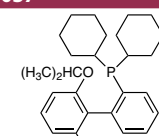
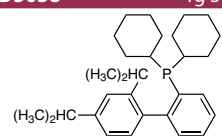
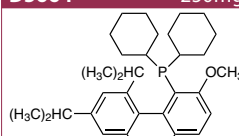
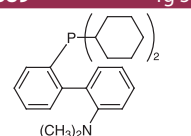
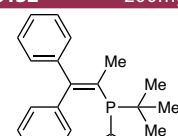
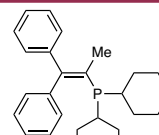
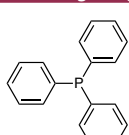
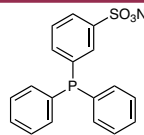
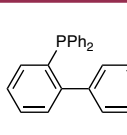
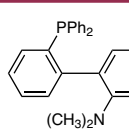
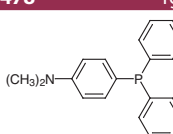
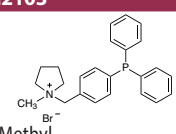
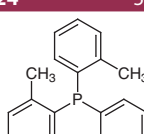
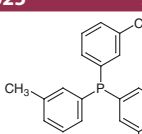
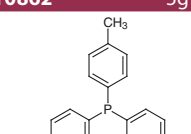
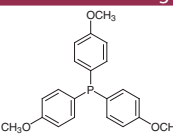
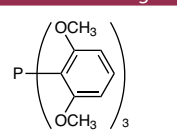
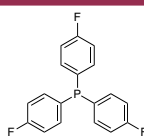
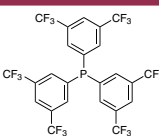
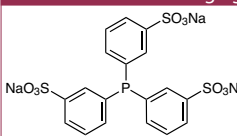
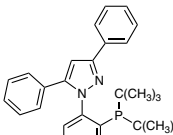
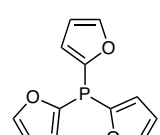
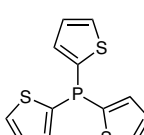
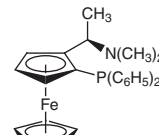
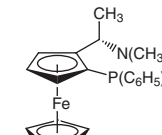
## Nickel Catalysts

**N0850** 25g 500gNickel(II) Chloride Anhydrous  
CAS RN: 7718-54-9**N0851** 25g 500gNickel(II) Chloride Hexahydrate  
CAS RN: 7791-20-0**N0760** 100g 500gNickel(II) Acetate Tetrahydrate  
CAS RN: 6018-89-9**N1050** 1g 10gDibromo(glyme)nickel  
CAS RN: 28923-39-9**N1049** 1g 10gNickel(II) Bromide 2-Methoxyethyl Ether Complex  
CAS RN: 312696-09-6**B2225** 1g 5g 25g[1,2-Bis(diphenylphosphino)ethane]nickel(II) Dichloride  
CAS RN: 14647-23-5**B1313** 5g 25g[1,3-Bis(diphenylphosphino)propane]nickel(II) Dichloride  
CAS RN: 15629-92-2**B2226** 1g 5g[1,1'-Bis(diphenylphosphino)ferrocene]nickel(II) Dichloride  
CAS RN: 67292-34-6**N0096** 25g 100g 500gBis(2,4-pentanedionato)nickel(II) Hydrate  
CAS RN: 120156-44-7**B3534** 1g 5gBis(tricyclohexylphosphine)nickel(II) Dichloride  
CAS RN: 19999-87-2**D5369** 250mgDichlorobis(dicyclohexylphenylphosphine)nickel(II)  
CAS RN: 19232-03-2**C3325** 100mg 500mgJamison Catalyst  
CAS RN: 1419179-26-2**B3354** 1gBromo[(2,6-pyridinediyl)bis(3-methyl-1-imidazolyl-2-ylidene)]nickel Bromide  
CAS RN: 894102-11-5**B3235** 200mg 1g[1,3-Bis(2,6-diisopropylphenyl)imidazol-2-ylidene]triphenylphosphine Nickel(II) Dichloride  
CAS RN: 903592-98-3**B1571** 10g 100gBis(triphenylphosphine)nickel(III) Dichloride  
CAS RN: 14264-16-5**S0487** 50gSkeletal Nickel Catalyst slurry in Water  
CAS RN: 7440-02-0**B3095** 5gNi(COD)<sub>2</sub>  
CAS RN: 1295-35-8**B5417** 5eachNi(COD)<sub>2</sub> (Wax encapsulated)  
(ca. 0.05mmol/capsule)  
CAS RN: 1295-35-8

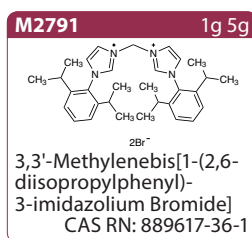
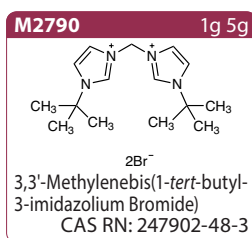
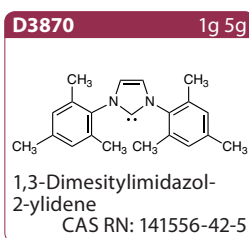
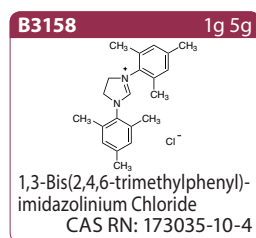
## Phosphine Ligands

**T2584** 1g 5gTri-*tert*-butylphosphonium Tetrafluoroborate  
CAS RN: 131274-22-1**T0361** 25mL 100mL 500mLTributylphosphine  
CAS RN: 998-40-3**T2585** 1g 5gTricyclohexylphosphonium Tetrafluoroborate  
CAS RN: 58656-04-5

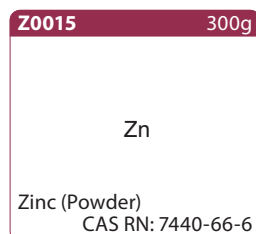
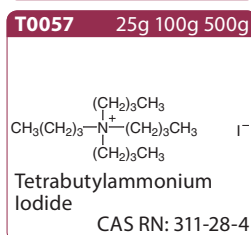
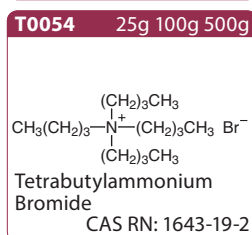
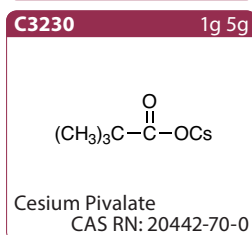
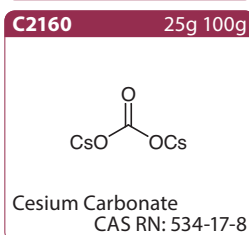
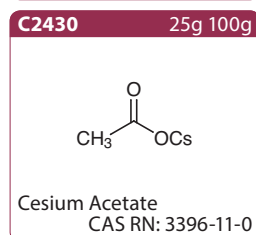
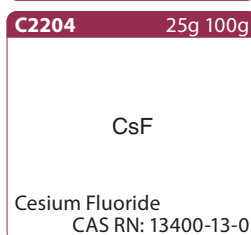
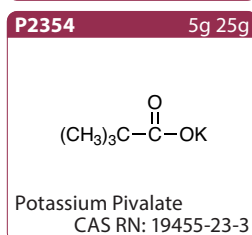
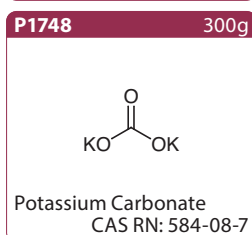
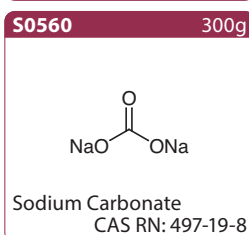
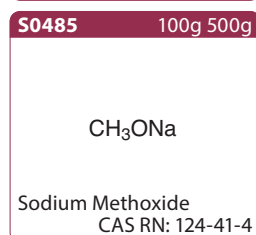
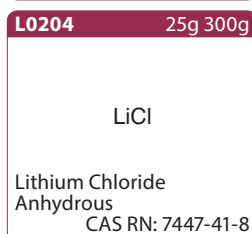
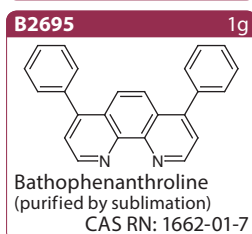
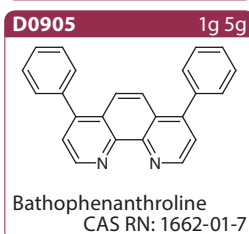
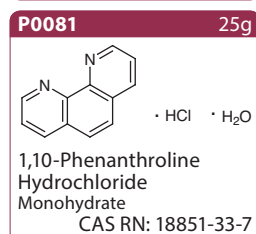
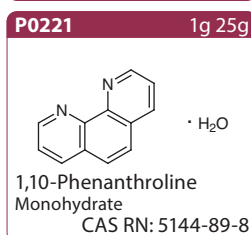
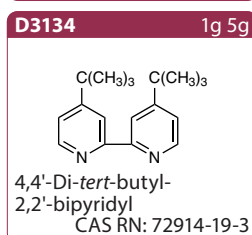
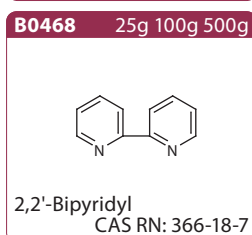
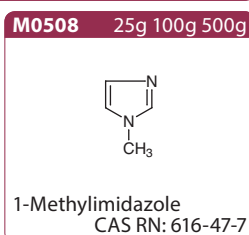
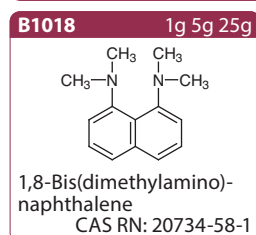
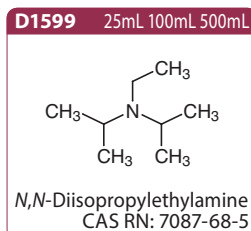
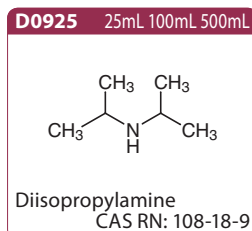
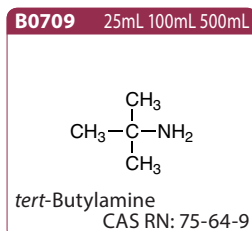
## Suzuki-Miyaura Cross Coupling Reaction

|                                                                                                                                                                                                                                   |                                                                                                                                                                                                 |                                                                                                                                                                                |                                                                                                                                                                                    |                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T1165</b> 25mL<br><br>Tricyclohexylphosphine (contains Tricyclohexylphosphine Oxide) (ca. 18% in Toluene, ca. 0.60mol/L)<br>CAS RN: 2622-14-2 | <b>M1318</b> 1g 5g<br><br>Methyldiphenylphosphine<br>CAS RN: 1486-28-8                                         | <b>E0519</b> 5g<br><br>Ethyldiphenylphosphine<br>CAS RN: 607-01-2                            | <b>I0583</b> 1g 5g<br><br>Isopropyldiphenylphosphine<br>CAS RN: 6372-40-3                       |                                                                                                                                                                                  |
| <b>D2630</b> 5g<br><br>Diphenylpropylphosphine<br>CAS RN: 7650-84-2                                                                              | <b>D3940</b> 5g<br><br>Di-tert-butylphenylphosphine<br>CAS RN: 32673-25-9                                      | <b>D4531</b> 1g 5g<br><br>Amphos<br>CAS RN: 932710-63-9                                       | <b>D3387</b> 1g 5g<br><br>JohnPhos<br>CAS RN: 224311-51-7                                        | <b>D5039</b> 1g 5g<br><br>tBuXPhos<br>CAS RN: 564483-19-8                                     |
| <b>D5663</b> 250mg<br><br>tert-ButylBrettPhos<br>CAS RN: 1160861-53-9                                                                            | <b>D2411</b> 1g 5g<br><br>Dicyclohexylphenylphosphine<br>CAS RN: 6476-37-5                                     | <b>D3388</b> 1g 5g<br><br>CyJohnPhos<br>CAS RN: 247940-06-3                                   | <b>D5035</b> 1g 5g<br><br>MePhos<br>CAS RN: 251320-86-2                                          | <b>D5036</b> 1g 5g<br><br>SPhos<br>CAS RN: 657408-07-6                                        |
| <b>D5037</b> 1g 5g<br><br>RuPhos<br>CAS RN: 787618-22-8                                                                                         | <b>D5038</b> 1g 5g<br><br>XPhos<br>CAS RN: 564483-18-7                                                        | <b>D5664</b> 250mg<br><br>BrettPhos<br>CAS RN: 1070663-78-3                                  | <b>D3389</b> 1g 5g<br><br>DavePhos<br>CAS RN: 213697-53-1                                       | <b>V0132</b> 200mg 1g<br><br>vBRIDP®<br>CAS RN: 384842-25-5                                  |
| <b>C2981</b> 200mg 1g<br><br>Cy-vBRIDP®<br>CAS RN: 384842-24-4                                                                                 | <b>T0519</b> 25g 100g 500g<br><br>Triphenylphosphine<br>CAS RN: 603-35-0                                     | <b>D2043</b> 1g 5g<br><br>Sodium Diphenylphosphinobenzene-3-sulfonate<br>CAS RN: 63995-75-5 | <b>D4688</b> 1g<br><br>2-(Diphenylphosphino)biphenyl<br>CAS RN: 13885-09-1                     | <b>D4402</b> 1g<br><br>PhDave-Phos<br>CAS RN: 240417-00-9                                   |
| <b>D2478</b> 1g 5g<br><br>4-(Dimethylamino)phenyldiphenylphosphine<br>CAS RN: 739-58-2                                                         | <b>M2103</b> 1g<br><br>1-Methyl-1-[4-(diphenylphosphino)benzyl]pyrrolidinium Bromide<br>CAS RN: 1229444-44-3 | <b>T1024</b> 5g 25g<br><br>Tri(o-tolyl)phosphine<br>CAS RN: 6163-58-2                       | <b>T1025</b> 5g 25g<br><br>Tri(m-tolyl)phosphine<br>CAS RN: 6224-63-1                          | <b>T0862</b> 5g 25g<br><br>Tri(p-tolyl)phosphine<br>CAS RN: 1038-95-5                       |
| <b>T0861</b> 5g 25g<br><br>Tris(4-methoxyphenyl)phosphine<br>CAS RN: 855-38-9                                                                  | <b>T1614</b> 5g 25g<br><br>Tris(2,6-dimethoxyphenyl)phosphine<br>CAS RN: 85417-41-0                          | <b>T2900</b> 5g<br><br>Tris(4-fluorophenyl)phosphine<br>CAS RN: 184377-80-0                 | <b>T2526</b> 1g 5g<br><br>Tris(3,5-bis(trifluoromethyl)phenyl)phosphine<br>CAS RN: 175136-62-6 | <b>T2187</b> 1g 5g<br><br>Tris(3-sulfophenyl)phosphine Trisodium Salt<br>CAS RN: 63995-70-0 |
| <b>D3834</b> 1g 5g<br><br>TrippyPhos<br>CAS RN: 628333-86-8                                                                                    | <b>T1643</b> 1g 5g<br><br>Tri(2-furyl)phosphine<br>CAS RN: 5518-52-5                                         | <b>T1666</b> 1g 5g<br><br>Tri(2-thienyl)phosphine<br>CAS RN: 24171-89-9                     | <b>D2535</b> 100mg<br><br>(R)-(S)-PPFA<br>CAS RN: 55700-44-2                                   | <b>D2536</b> 100mg<br><br>(S)-(R)-PPFA<br>CAS RN: 55650-58-3                                |

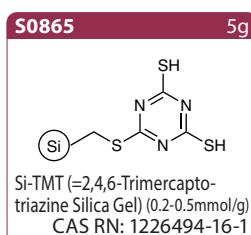
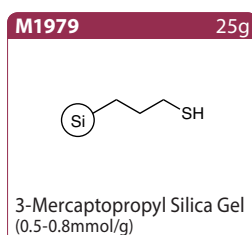
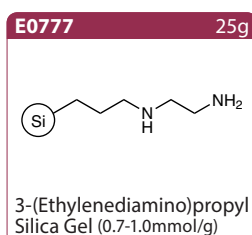
|                                                                                                                      |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                         |                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>D2774</b> 100mg 1g<br><br><b>(R)-(+)-MOP</b><br>CAS RN: 145964-33-6                                               | <b>B1982</b> 5g 25g<br><br><b>Bis(diphenylphosphino)-methane</b><br>CAS RN: 2071-20-7                     | <b>B1137</b> 10g 25g<br><br><b>1,2-Bis(diphenylphosphino)-ethane</b><br>CAS RN: 1663-45-2                                                                                                                                                                                                                                                                                                                                                             | <b>B1138</b> 5g 25g<br><br><b>1,3-Bis(diphenylphosphino)propane</b><br>CAS RN: 6737-42-4                | <b>B1246</b> 5g 25g<br><br><b>1,4-Bis(diphenylphosphino)butane</b><br>CAS RN: 7688-25-7                           |
| <b>B1960</b> 1g<br><br><b>1,5-Bis(diphenylphosphino)pentane</b><br>CAS RN: 27721-02-4                                | <b>B1959</b> 1g 5g<br><br><b>1,6-Bis(diphenylphosphino)hexane</b><br>CAS RN: 19845-69-3                   | <b>B2867</b> 5g 25g<br><br><b>Bis[2-(diphenylphosphino)phenyl] Ether</b><br>CAS RN: 166330-10-5                                                                                                                                                                                                                                                                                                                                                       | <b>B2709</b> 1g 5g 25g<br><br><b>Xantphos</b><br>CAS RN: 161265-03-8                                    | <b>B5239</b> 200mg 1g<br><br><b>4,5-Bis(dicyclohexylphosphino)-9,9-dimethylxanthene</b><br>CAS RN: 940934-47-4    |
| <b>B5957</b> 100mg 500mg<br><br><b>2,2'-Biphenyldiylbis[bis(3,5-dimethylphenyl)phosphine]</b><br>CAS RN: 325773-62-4 | <b>B2711</b> 100mg 1g<br><br><b>1,1'-Bis(di-tert-butylphosphino)ferrocene</b><br>CAS RN: 84680-95-5       | <b>B2710</b> 100mg 1g<br><br><b>1,1'-Bis(diisopropylphosphino)ferrocene</b><br>CAS RN: 97239-80-0                                                                                                                                                                                                                                                                                                                                                     | <b>B2027</b> 1g 5g 25g<br><br><b>1,1'-Bis(diphenylphosphino)ferrocene</b><br>CAS RN: 12150-46-8         | <b>B2383</b> 5g 25g<br><br><b>(±)-BINAP</b><br>CAS RN: 98327-87-8                                                 |
| <b>B1406</b> 1g 5g 25g<br><br><b>(R)-(+)-BINAP</b><br>CAS RN: 76189-55-4                                             | <b>B1405</b> 1g 5g<br><br><b>(S)-(-)-BINAP</b><br>CAS RN: 76189-56-5                                      | <div> <div><b>N-Heterocyclic Carbene Ligands</b></div> <div> <div> <b>D3622</b> 1g 5g<br/> <br/> <b>1,3-Di-tert-butylimidazolium Tetrafluoroborate</b><br/> CAS RN: 137581-18-1 </div> <div> <b>D3623</b> 1g<br/> <br/> <b>1-Methyl-3-propylimidazolium Tetrafluoroborate</b><br/> CAS RN: 286014-34-4 </div> <div> <b>D3711</b> 1g 5g<br/> <br/> <b>1,3-Di-tert-butylimidazolium Tetrafluoroborate</b><br/> CAS RN: 263163-17-3 </div> </div> </div> |                                                                                                         |                                                                                                                   |
| <b>D5498</b> 1g<br><br><b>1,3-Di-tert-butylimidazolium Tetrafluoroborate</b><br>CAS RN: 1372124-90-7                 | <b>D5513</b> 1g<br><br><b>1,3-Di-tert-butylimidazolium Tetrafluoroborate</b><br>CAS RN: 1176202-63-3      | <b>D3472</b> 1g 5g<br><br><b>1,3-Di-tert-butylimidazol-2-ylidene</b><br>CAS RN: 157197-53-0                                                                                                                                                                                                                                                                                                                                                           | <b>M3036</b> 5g 25g<br><br><b>1-Methyl-3-propylimidazolium Tetrafluoroborate</b><br>CAS RN: 244193-48-4 | <b>D3882</b> 1g 5g<br><br><b>1,3-Dicyclohexylimidazolium Chloride</b><br>CAS RN: 181422-72-0                      |
| <b>D3850</b> 1g 5g 25g<br><br><b>1,3-Dicyclohexylimidazolium Tetrafluoroborate</b><br>CAS RN: 286014-38-8            | <b>D3620</b> 500mg<br><br><b>1,3-Di(1-adamantyl)imidazolium Tetrafluoroborate</b><br>CAS RN: 1176202-63-3 | <b>D3621</b> 1g<br><br><b>1-Ad-HBF4</b><br>CAS RN: 286014-42-4                                                                                                                                                                                                                                                                                                                                                                                        | <b>B5603</b> 1g<br><br><b>IPr-CO2</b><br>CAS RN: 917604-39-8                                            | <b>D3611</b> 500mg 5g 25g<br><br><b>1,3-Bis(2,6-diisopropylphenyl)imidazolium Chloride</b><br>CAS RN: 250285-32-6 |
| <b>B3157</b> 500mg 1g 5g<br><br><b>1,3-Bis(2,6-diisopropylphenyl)imidazolium Chloride</b><br>CAS RN: 258278-25-0     | <b>B3465</b> 1g 5g<br><br><b>1,3-Bis(2,6-diisopropylphenyl)imidazol-2-ylidene</b><br>CAS RN: 244187-81-3  | <b>B3506</b> 1g<br><br><b>1,3-Bis(2,6-diisopropylphenyl)imidazolidin-2-ylidene</b><br>CAS RN: 258278-28-3                                                                                                                                                                                                                                                                                                                                             | <b>D5401</b> 1g<br><br><b>IMes-CO2</b><br>CAS RN: 675877-56-2                                           | <b>D3446</b> 1g 5g<br><br><b>1,3-Dimesitylimidazolium Chloride</b><br>CAS RN: 141556-45-8                         |



## Bases, Additive Agents



## Metal Scavengers



## Ordering and Customer Service

### TCI AMERICA

Tel : 800-423-8616 / 503-283-1681  
Fax : 888-520-1075 / 503-283-1987  
E-mail : Sales-US@TCIchemicals.com

### TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00  
Fax : +32 (0)3 735 07 01  
E-mail : Sales-EU@TCIchemicals.com

### TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00  
Fax : +49 (0)6196 64053-01  
E-mail : Sales-DE@TCIchemicals.com

### Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 784560  
E-mail : Sales-UK@TCIchemicals.com

### TCI Chemicals (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909  
Fax : 044-2262 8902  
E-mail : Sales-IN@TCIchemicals.com

### 梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386  
Fax : 021-6712-1385  
E-mail : Sales-CN@TCIchemicals.com

### TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878  
E-mail : globalbusiness@TCIchemicals.com

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.