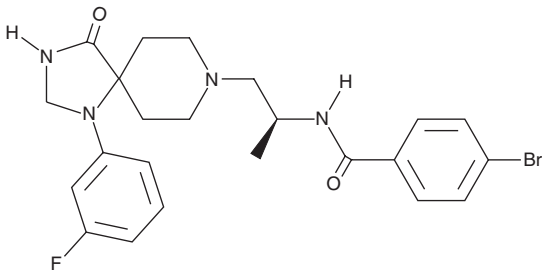
PRODUCT INFORMATION

ML-299

Item No. 17632

CAS Registry No.:	1426916-00-8
Formal Name:	4-bromo-N-[(1S)-2-[1-(3-fluorophenyl)-4-oxo-1,3,8-triazaspiro[4.5]dec-8-yl]-1-methylethyl]-benzamide
Synonym:	CID 56593087
MF:	$C_{23}H_{26}BrFN_4O_2$
FW:	489.4
Purity:	≥95%
UV/Vis.:	λ_{max}: 247 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ML-299 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-299 in the solvent of choice, which should be purged with an inert gas. ML-299 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-299 in these solvents is approximately 1, 25, and 30 mg/ml, respectively.

ML-299 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-299 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ML-299 has a solubility of approximately 0.5 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ML-299 is a dual inhibitor of phospholipase D_1 (PLD_1) and PLD_2 (IC_{50}s = 6 and 20 nM, respectively).[1] It is selective for PLD_1 and PLD_2 over a panel of 65 receptors but also inhibits human-ether-a-go-go (hERG), also known as K_v11.1, as well as κ- and μ-opioid receptors at 10 μM.{28738} ML-299 (1 and 10 μM) decreases invasive migration of U87MG glioblastoma cells.[1]

References

1. O'Reilly, M.C., Scott, S.A., Brown, K.A., *et al.* Development of dual PLD1/2 and PLD2 selective inhibitors from a common 1,3,8-triazaspiro[4.5]decane core: Discovery of ML298 and ML299 that decrease invasive migration in U87-MG glioblastoma cells. *J. Med. Chem.* **56(6)**, 2695-2699 (2013).
2. Scott, S.A., O'Reilly, M.C., Daniels, J.S., *et al.* Development of a selective, allosteric PLD1/2 inhibitor in a novel scaffold. In: Probe reports from the NIH Molecular Libraries Program [Internet]. Bethesda (MD): National Center for Biotechnolgy Information(2013). Available from: http://www.ncbi.nlm.nih.gov/books/NBK143555/

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM