

Product Data Sheet

Product Name: Protease-Activated Receptor-4, PAR-4 Agonist, amide

Catalog Number: AS-60218-1 (1 mg) Lot Number: See label on vial

AS-60218-5 (5 mg)

Sequence: H-Ala-Tyr-Pro-Gly-Lys-Phe-NH2 (3-letter code)

AYPGKF-NH2 (1-letter code)

Molecular Weight: 680.8

Peptide Purity: >95%

Appearance: Lyophilized white powder

Peptide Reconstitution: PAR-4 agonist peptide is freely soluble in water.

Storage: PAR-4 agonist peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at –20°C or lower. Reconstituted peptide can be aliquoted and stored at -20 °C or lower.

Description: PAR-4 agonist peptide stimulates thromboxane production by human platelets with the maximal response to this agonist being approximately half of that observed after maximal thrombin stimulation. Ref: Sabri, A. et al. *J. Biol. Chem.* **278**, 11714 (2003); Ma, L. et al. *Proc. Natl. Acad. Sci. USA* **102**, 216 (2005).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

The PAR-APs, including TFLLRN-NH₂ (PAR1-AP), SLIGRL-NH₂ (PAR2-AP), AYPGKF-NH₂ (PAR4-AP), and control SLIGRL peptide (LSIGRL) were synthesized as carboxyl amides and purified by reverse-phase HPLC (AnaSpec). The PAR-APs and LSIGRL were dissolved in HEPES-buffered Hanks' at concentration of 50 mM. To deliver PAR-APs during ventilation, a lateral vent was made in a tracheal cannula at the proximal end of the carina and connected with a PE 10 by superglue. An insulin syringe containing 25 μl of PAR-APs (50 mM), 25 μl of LSIGRL (50 mM), or Hanks' was connected with PE-10 and was injected in 1 min, followed by 25 μl of air. To prevent reflux of the instillate, mice were placed in a supine position on a board with an angle of 45°. In nonventilated mice, anesthesia was induced with ketamine (90 mg/kg) and xylazine (10 mg/kg). The mouse was suspended with incisors attached to a ~60° wood support by 3/0 suture-Morrell, C. N. et al. J. Pharmacol. Exp. Ther. 314, 155 (2005).

Published Citations:

Kataoka, H. et al. *Blood.* **102**, 3224 (2003). Rauch, BH. et al. *Circ Res* **94**, 340 (2004). Su, X. et al. *J Immunology*. **175**, 2598 (2005). Morrell, C. N. et al. *J. Pharmacol. Exp. Ther.* **314**, 155 (2005).

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Wang, W. et al. IJC 126, 599 (2010)

Related Products:

| Name | Cat # | Size |
|--|----------------------|--------------|
| | | |
| Protease-Activated Receptor-4, PAR-4 Agonist, amide, murine GYPGKF-NH2 | AS-60778 | 1 mg |
| Protease-Activated Receptor-3 (1-6), PAR-3 (1-6), human TFRGAP-NH2 | AS-62657 | 1 mg |
| Protease-Activated Receptor-3, PAR-3 Agonist, amide SFNGGP-NH2 | AS-62938 | 1 mg |
| Protease-Activated Receptor-2, PAR-2 Agonist, amide SLIGKV-NH2 | AS-60217-5 | 5 mg |
| | | |
| Protease-Activated Receptor-1, PAR-1 Agonist TFLLRN | AS-61530 | 1 mg |
| Protease-Activated Receptor-1, PAR-1 Agonist, amide TFLLRNPNDK-NH2 | AS-62936 AS-62937 | 1 mg 5 mg |

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