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ProductInformation

Ala-Tyr-Pro-Gly-Lys-Phe-NH_2
trifluoroacetate salt
Product Number **A 3227**
Storage Temperature –20°C

Cas #: 352017-71-1
Synonyms: AYPGKF-NH_2, PAR4-AP

Product Description

Molecular Formula: $C_{34}H_{48}N_8O_7$
Molecular Weight: 680.8

Ala-Tyr-Pro-Gly-Lys-Phe-NH_2 (AYPGKF-NH_2) is a selective proteinase-activated receptor 4 (PAR4) specific agonist peptide, which may be used for probing PAR4 signaling in culture systems and in platelets.[1] AYPGKF stimulates platelet aggregation *in vitro* (EC_{50} = 15 μM).[2] Human platelets with the PAR4 agonist AYPGKF stimulates the production of thromboxane.[3] The thrombin-induced release of endostatin from rat platelets is mediated by the PAR4 agonist AYPGKF and in contrast, the PAR4 antagonist trans-cinnamoyl-YPGKF-NH_2 (Product No. C 7363) blocks endostatin release and platelet aggregation.[4]

Reagent

Ala-Tyr-Pro-Gly-Lys-Phe-NH_2 is supplied as a solid.
Purity: ≥ 98% (HPLC)

Precautions and Disclaimer

For R & D use only. Not for drug, household or other uses.
Consult the MSDS for information regarding hazards and safe handling practices.

Preparation Instructions

Ala-Tyr-Pro-Gly-Lys-Phe-NH_2 is soluble in water.

Storage/Stability

Store at –20 °C.

References

1. Faruqi TR, et al., Structure-function analysis of protease-activated receptor 4 tethered ligand peptides. Determinants of specificity and utility in assays of receptor function. J. Biol. Chem., **275**, 19728-19734 (2000).
2. Hollenberg, M.D., and Saifeddine, M., Proteinase-activated receptor 4 (PAR4): activation and inhibition of rat platelet aggregation by PAR4-derived peptides. Can. J. Physiol. Pharmacol., **79**, 439-442 (2001).
3. Henriksen, R.A., and Hanks, V.K., PAR-4 agonist AYPGKF stimulates thromboxane production by human platelets. Arterioscler. Thromb. Vasc. Biol., **22**, 861-866 (2002).
4. Ma, L., et al., Thrombin-induced platelet endostatin release is blocked by a proteinase-activated receptor 4 (PAR4) antagonist. Br. J. Pharmacol., **134**, 701-704 (2001).

KAA 04/03