PRODUCT INFORMATION

TRAP-6 amide (trifluoroacetate salt)

Item No. 36881

Formal Name: (S)-2-((2S,5S,8S,11S,14S)-14-amino-11-benzyl-2-(3-guanidinopropyl)-15-hydroxy-5,8-diisobutyl-4,7,10,13-tetraoxo-3,6,9,12-tetraazapentadecanamido) succinamide

Synonyms: Ser-Phe-Leu-Leu-Arg-Asn-NH_2, SFLLRN-NH_2, Thrombin Receptor Agonist Peptide-6 amide

MF: $C_{34}H_{57}N_{11}O_8 \bullet XCF_3COOH$

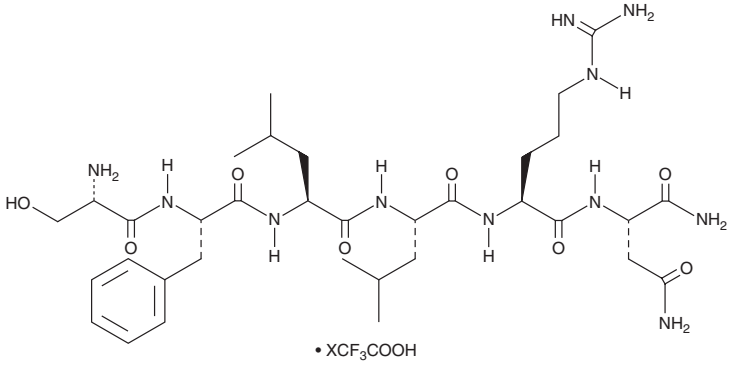
FW: 747.9

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

TRAP-6 amide (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the TRAP-6 amide (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. TRAP-6 amide (trifluoroacetate salt) is soluble in the organic solvent DMSO at a concentration of approximately 12 mg/ml. TRAP-6 amide (trifluoroacetate salt) is also slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of TRAP-6 amide (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of TRAP-6 amide (trifluoroacetate salt) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TRAP-6 amide is a peptide agonist of proteinase-activated receptor 1 (PAR1).[1] It induces platelet aggregation *in vitro* (EC_{50} = 0.15 µM). TRAP-6 amide (30 µM) induces relaxation of isolated guinea pig internal anal sphincter strips.[2] It also increases cigarette smoke extract-induced IL-8 release from isolated human bronchial epithelial cells when used at a concentration of 50 µM.[3]

References

1. Elliott, J.T., Hoekstra, W.J., Derian, C.K., *et al.* Tritiated photoactivatable analogs of the native human thrombin receptor (PAR-1) agonist peptide, SFLLRN-NH_2. *J. Pept. Res.* **57(6)**, 494-506 (2001).
2. Huang, S.-C. Proteinase-activated receptor-1 (PAR1) and PAR2 mediate relaxation of guinea pig internal anal sphincter. *Regul. Pept.* **189**, 46-50 (2014).
3. Montalbano, A.M., Chiappara, G., Albano, G.D., *et al.* Expression/activation of PAR-1 in airway epithelial cells of COPD patients: Ex vivo/in vitro study. *Int. J. Mol. Sci.* **22(19)**, 10703 (2021).

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