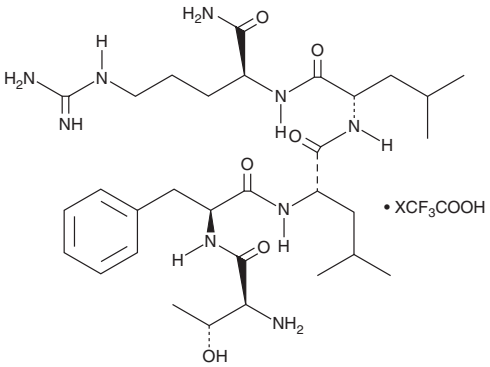
PRODUCT INFORMATION

TFLLR-NH_2 (trifluoroacetate salt)

Item No. 27548



Formal Name: (S)-2-((S)-2-((2S,3R)-2-amino-3-hydroxybutanamido)-3-phenylpropanamido)-N-((S)-1-(((S)-1-amino-5-guanidino-1-oxopentan-2-yl)amino)-4-methyl-1-oxopentan-2-yl)-4-methylpentanamide, trifluoroacetate salt

MF: $C_{31}H_{53}N_9O_6 \bullet XCF_3COOH$

FW: 647.8

Purity: ≥98%

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

TFLLR-NH_2 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the TFLLR-NH_2 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. TFLLR-NH_2 (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of TFLLR-NH_2 (trifluoroacetate salt) in these solvents is approximately 0.5, 10, and 5 mg/ml, respectively.

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 TFLLR-NH_2 (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of TFLLR-NH_2 (trifluoroacetate salt) in PBS (pH 7.2) is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TFLLR-NH_2 is a synthetic peptide agonist of proteinase-activated receptor 1 (PAR1) that induces calcium mobilization in isolated rat dorsal root ganglion neurons (EC_{50} = 1.9 µM).[1] *In vivo*, TFLLR-NH_2 (3 µmol/kg) stimulates plasma extravasation in the bladder, esophagus, stomach, intestine, and pancreas in wild-type, but not *PAR1*$^{-/-}$, mice. It also reduces carrageenan-induced hyperalgesia in rats.[2]

References

1. de Garvilla, L., Vergnolle, N., Young, S.H., *et al.* Agonists of proteinase-activated receptor 1 induce plasma extravasation by a neurogenic mechanism. *Br. J. Pharmacol.* **133(7)**, 975-987 (2001).
2. Kawabata, A., Kawao, N., Kuroda, R., *et al.* The PAR-1-activating peptide attenuates carrageenan-induced hyperalgesia in rats. *Peptides* **23(6)**, 1181-1183 (2002).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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