

PRODUCT INFORMATION



[Sar⁹, Met(O₂)¹¹]-Substance P (trifluoroacetate salt) Item No. 30106

Formal Name: (S)-2-((S)-1-(L-arginyl-L-prolyl-L-lysyl)pyrrolidine-2-carboxamido)-N¹-((S)-5-amino-1-(((S)-1-(((S)-1-((2-(((S)-1-(((S)-1-amino-4-(methylsulfonyl)-1-oxobutan-2-yl)amino)-4-methyl-1-oxopentan-2-yl)amino)-2-oxoethyl)(methyl)amino)-1-oxo-3-phenylpropan-2-yl)amino)-1-oxo-3-phenylpropan-2-yl)amino)-1,5-dioxopentan-2-yl)pentanediamide, trifluoroacetate salt

Synonym: Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-{Sar}-Leu-Met[O₂]-NH₂

MF: C₆₄H₁₀₀N₁₈O₁₅S • XCF₃COOH

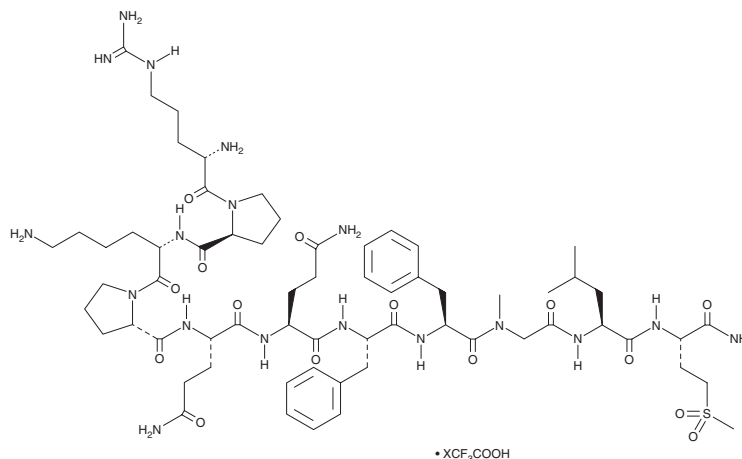
FW: 1,393.7

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

[Sar⁹, Met(O₂)¹¹]-Substance P (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the [Sar⁹, Met(O₂)¹¹]-Substance P (trifluoroacetate salt) in water. The solubility of [Sar⁹, Met(O₂)¹¹]-Substance P (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

[Sar⁹, Met(O₂)¹¹]-Substance P (Sar-SP) is a peptide agonist of the neurokinin-1 (NK₁) receptor.¹ It is selective for NK₁ over NK₂ and NK₃ receptors. Sar-SP induces inositol phosphate formation in U373MG glioblastoma cells with an EC₅₀ value of 3.8 nM, an effect that can be blocked by the NK₁ receptor antagonist SR 140333.² It induces contractions in isolated human bronchi when used at concentrations of 3, 100, and 1,000 nM.⁴ Sar-SP (10, 25, 65, and 100 pmol/animal, i.c.v.) increases mean arterial pressure and heart rate in conscious rats.⁵

References

- Regoli, D., Drapeau, G., Dion, S., *et al.* New selective agonists for neurokinin receptors: pharmacological tools for receptor characterization. *Trends Pharmacol. Sci.* **9(8)**, 290-295 (1988).
- Oury-Donat, F., Thurneyssen, L.O., Gauthier, T., *et al.* SR 1140333, a novel, selective, and potent nonpeptide antagonist of the NK1 tachykinin receptor: Characterization on the U373MG cell line. *J. Neurochem.* **62(4)**, 1399-1407 (1994).
- Barchasz, E., Naline, E., Molimard, M., *et al.* Interleukin-1 β -induced hyperresponsiveness to [Sar⁹,Met(O₂)¹¹] substance x 2 P in isolated human bronchi. *Eur. J. Pharmacol.* **379(1)**, 87-95 (1999).
- Cellier, E., Barbot, L., Iyengar, S., *et al.* Characterization of central and peripheral effects of septide with the use of five tachykinin NK₁ receptor antagonists in the rat. *Br. J. Pharmacol.* **127(3)**, 717-728 (1999).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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