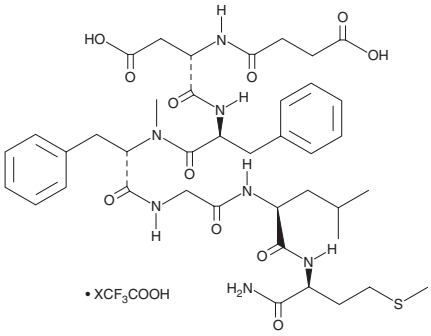
PRODUCT INFORMATION

Senktide (trifluoroacetate salt)

Item No. 16721



Formal Name:	N-(3-carboxy-1-oxopropyl)-L-α-aspartyl-L-phenylalanyl-N-methyl-L-phenylalanylglycyl-L-leucyl-L-methioninamide, trifluoroacetate salt
MF:	$C_{40}H_{55}N_7O_{11}S \bullet XCF_3COOH$
FW:	842.0
Purity:	≥95%
Supplied as:	A crystalline 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

Senktide (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the senktide (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Senktide (trifluoroacetate salt) is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

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 senktide (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of senktide (trifluoroacetate salt) in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Senktide is a potent, selective agonist of the neuromedin K3 (NK_3) receptor (EC_{50} = 0.5-3 nM).[1-3] It less potently agonizes the NK_1 receptor (EC_{50} = 35 µM) and is without effect on the NK_2 receptor. [1-3] Senktide is used to study the action of the NK_3 receptor in cells and in animals.[4,5]

References

1. Byk, G., Halle, D., Zeltser, I., *et al.* Synthesis and biological activity of NK-1 selective, N-backbone cyclic analogs of the C-terminal hexapeptide of substance P. *J. Med. Chem.* **39(16)**, 3174-3178 (1996).
2. Sarau, H.M., Griswold, D.E., Potts, W., *et al.* Nonpeptide tachykinin receptor antagonists: I. Pharmacological and pharmacokinetic characterization of SB 223412, a novel, potent and selective neurokinin-3 receptor antagonist. *J. Pharmacol. Exp. Ther.* **281(3)**, 1303-1311 (1997).
3. Harrison, T., Korsgaard, M.P., Swain, C.J., *et al.* High affinity, selective neurokinin 2 and neurokinin 3 receptor antagonists from a common structural template. *Bioorg. Med. Chem. Lett.* **8(11)**, 1343-1348 (1998).
4. Thakar, A., Sylar, E., and Flynn, F.W. Activation of tachykinin, neurokinin 3 receptors affects chromatin structure and gene expression by means of histone acetylation. *Peptides* **38(2)**, 282-290 (2012).
5. Gaskins, G.T., Glanowska, K.M., and Moenter, S.M. Activation of neurokinin 3 receptors stimulates GnRH release in a location-dependent but kisspeptin-independent manner in adult mice. *Endocrinology* **154(11)**, 3984-3989 (2013).

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.

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