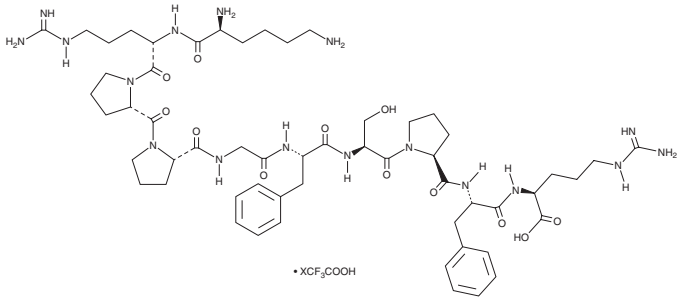
PRODUCT INFORMATION

Kallidin (380-389) (human, porcine, bovine) (trifluoroacetate salt)

Item No. 31481



Formal Name:	L-lysyl-L-arginyl-L-prolyl-L-prolylglycyl-L-phenylalanyl-L-seryl-L-prolyl-L-phenylalanyl-L-arginine
Synonyms:	KRPPGFSPFR, Lys-BK, Lysine Bradykinin
MF:	$C_{56}H_{85}N_{17}O_{12} \bullet XCF_3COOH$
FW:	1,188.4
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years

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

Laboratory Procedures

Kallidin (380-389) (human, porcine, bovine) (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the kallidin (380-389) (human, porcine, bovine) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Kallidin (380-389) (human, porcine, bovine) (trifluoroacetate salt) is slightly soluble in DMSO.

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 kallidin (380-389) (human, porcine, bovine) (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of kallidin (380-389) (human, porcine, bovine) (trifluoroacetate salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Kallidin (380-389) is a short-lived kinin peptide involved in inflammation and pain.[1] It binds to bradykinin B_2 (IC_{50} = 0.63 nM) and B_1 receptors (K_i = 3.23 nM) and acts as an agonist.[1-3] It is formed in tissue, including the brain, *via* cleavage of low molecular weight kininogen (LMWK) by kallikrein serine proteases released in response to injury or inflammation and can be converted into bradykinin.[1] Kallidin levels in interstitial muscle are increased in women with work-related trapezius myalgia.[4]

References

1. Dray, A. Kinins and their receptors in hyperalgesia. *Can. J. Physiol. Pharmacol.* **75(6)**, 704-712 (1997).
2. Bastian, S., Loillier, B., Paquet, J.L., *et al.* Stable expression of human kinin B_1 receptor in 293 cells: Pharmacological and functional characterization. *Br. J. Pharmacol.* **122(2)**, 393-399 (1997).
3. Hess, J.F., Borkowski, J.A., Macneil, T., *et al.* Differential pharmacology of cloned human and mouse B_2 bradykinin receptors. *Mol. Pharmacol.* **45(1)**, 1-8 (1994).
4. Gerdle, B., Hilgenfeldt, U., Larsson, B., *et al.* Bradykinin and kallidin levels in the trapezius muscle in patients with work-related trapezius myalgia, in patients with whiplash associated pain, and in healthy controls - a microdialysis study of women. *Pain* **139(3)**, 578-87 (2008).

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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