

PRODUCT INFORMATION



LIH383 (trifluoroacetate salt)

Item No. 36967

Formal Name: (S)-6-amino-2-((2S,5S,8S,11S,20S)-20-amino-11-benzyl-2,5-bis(3-guanidinopropyl)-8-(2-(methylthio)ethyl)-4,7,10,13,16,19-hexaoxa-21-phenyl-3,6,9,12,15,18-hexaazahenicosanamido)hexanamide, trifluoroacetate salt

Synonym: Phe-Gly-Gly-Phe-Met-Arg-Arg-Lys-NH₂

Peptide Sequence: FGGFMRRK-NH₂

MF: C₄₅H₇₂N₁₆O₈S • XCF₃COOH

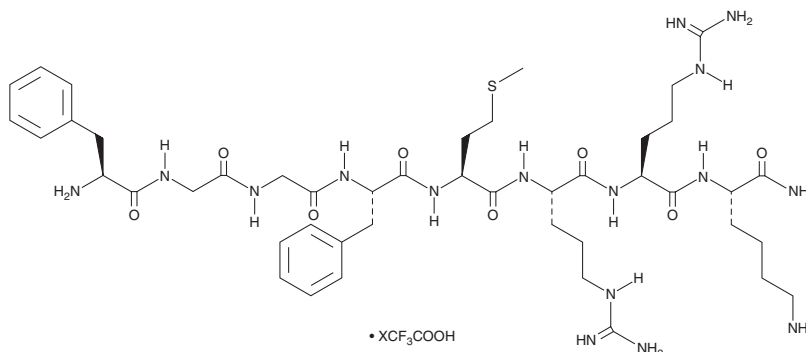
FW: 997.2

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

LIH383 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the LIH383 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. LIH383 (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LIH383 (trifluoroacetate salt) in these solvents is approximately 10 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 LIH383 (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of LIH383 (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

LIH383 is a peptide agonist of chemokine (C-X-C motif) receptor 7 (CXCR7), a chemokine and opioid peptide scavenger receptor.¹ It selectively activates CXCR7 (EC₅₀ = 0.61 nM) over μ-, δ-, and κ-opioid receptors and the nociceptin opioid peptide (NOP) receptor in β-arrestin recruitment assays at 3 μM. LIH383 (3 μM) prevents CXCR7 uptake of opioid peptides induced by the non-selective opioid receptor agonist dynorphin A (Item No. 18169) in U87-ACKR3 cells.

Reference

1. Meyrath, M., Szpakowska, M., Zeiner, J., *et al.* The atypical chemokine receptor ACKR3/CXCR7 is a broad-spectrum scavenger for opioid peptides. *Nat. Commun.* **11**(1), 3033 (2020).

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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