

PRODUCT INFORMATION



PMX-205 (trifluoroacetate salt)

Item No. 13607

Formal Name: N²-(1-oxo-3-phenylpropyl)-L-ornithyl-L-prolyl-3-cyclohexyl-D-alanyl-L-tryptophyl-L-arginine, (5→1)-lactam, 2,2,2-trifluoroacetate

MF: C₄₅H₆₂N₁₀O₆ • XCF₃COOH

FW: 839.1

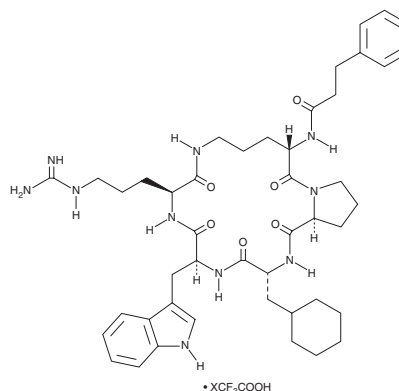
Purity: ≥95%

UV/Vis.: λ_{max}: 219, 281 nm

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

PMX-205 (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the PMX-205 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. PMX-205 (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PMX-205 (trifluoroacetate salt) in these solvents is approximately 30 mg/ml.

PMX-205 (trifluoroacetate salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PMX-205 (trifluoroacetate salt) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PMX-205 (trifluoroacetate salt) has a solubility of approximately 0.14 mg/ml in a 1:6 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PMX-205 is a cyclic hexapeptide that acts as a potent antagonist of C5a receptor (C5aR; IC₅₀ = 31 nM).¹ It is orally active and blocks inflammatory signaling and symptoms in animal models of colitis and allergic asthma.^{2,3} PMX-205 is also brain penetrant and reduces neuroinflammation and neurodegeneration in an animal model of Alzheimer's disease.⁴

References

1. March, D.R., Proctor, L.M., Stoermer, M.J., *et al.* Potent cyclic antagonists of the complement C5a receptor on human polymorphonuclear leukocytes. Relationships between structures and activity. *Mol. Pharmacol.* **65**(4), 868-879 (2004).
2. Jain, U., Woodruff, T.M., and Stadnyk, A.W. The C5a receptor antagonist PMX205 ameliorates experimentally induced colitis associated with increased IL-4 and IL-10. *Br. J. Pharmacol.* **168**(2), 488-501 (2013).
3. Staab, E.B., Sanderson, S.D., Wells, S.M., *et al.* Treatment with the C5a receptor/CD88 antagonist PMX205 reduces inflammation in a murine model of allergic asthma. *Int. Immunopharmacol.* **21**(2), 293-300 (2014).
4. Fonseca, M.I., Ager, R.R., Chu, S.-H., *et al.* Treatment with a C5aR antagonist decreases pathology and enhances behavioral performance in murine models of Alzheimer's disease. *J. Immunol.* **183**(2), 1375-1383 (2009).

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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