

PRODUCT INFORMATION



PMX-53 (trifluoroacetate salt)

Item No. 35840

CAS Registry No.: 514814-99-4

Formal Name: (6→2)-lactam, N-acetyl-L-phenylalanyl-L-ornithyl-L-prolyl-3-cyclohexyl-D-alanyl-L-tryptophyl-L-arginine, trifluoroacetate salt

Synonyms: AcF-[OPdChaWR],
AcPhe-[Orn-Pro-D-Cyclohexylalanine-Trp-Arg],
3D53

Peptide Sequence: Ac-Phe[Orn-Pro-D-Cha-Trp-Arg]

MF: $C_{47}H_{65}N_{11}O_7 \cdot XCF_3COOH$

FW: 896.1

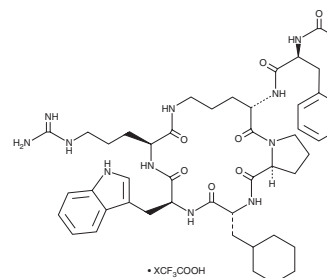
Purity: $\geq 95\%$

UV/Vis.: λ_{max} : 220 nm

Supplied as: A solid

Storage: $-20^\circ C$

Stability: ≥ 4 years



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

Laboratory Procedures

PMX-53 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the PMX-53 (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

PMX-53 is a macrocyclic complement 5a (C5a) peptidomimetic and an antagonist of the C5a receptor ($IC_{50} = 0.3 \mu M$).¹ It inhibits C5a-induced secretion of myeloperoxidase (MPO) in isolated human polymorphonuclear leukocytes (PMNs). PMX-53 (10 mg/kg, p.o.) inhibits vascular leakage, PMN infiltration, and peritoneal TNF- α and IL-6 production in a rat model of the peritoneal Arthus reaction.² It reduces body weight loss and anorexia and inhibits striatal degeneration in a rat model of Huntington's disease induced by 3-nitropropionic acid (3-NP; Item No. 14684).³ PMX-53 (3 mg/kg) also reduces atherosclerotic lesion size and lipid content in *ApoE*^{-/-} mice.⁴

References

1. Finch, A.M., Wong, A.K., Paczkowski, N.J., *et al.* Low-molecular-weight peptidic and cyclic antagonists of the receptor for the complement factor C5a. *J. Med. Chem.* **42(11)**, 1965-1974 (1999).
2. Strachan, A.J., Shiels, I.A., Reid, R.C., *et al.* Inhibition of immune-complex mediated dermal inflammation in rats following either oral or topical administration of a small molecule C5a receptor antagonist. *Br. J. Pharmacol.* **134(8)**, 1778-1786 (2001).
3. Woodruff, T.M., Crane, J.W., Proctor, L.M., *et al.* Therapeutic activity of C5a receptor antagonists in a rat model of neurodegeneration. *FASEB J.* **20(9)**, 1407-1417 (2006).
4. Manthey, H.D., Thomas, A.C., Shiels, I.A., *et al.* Complement C5a inhibition reduces atherosclerosis in *ApoE*^{-/-} mice. *FASEB J.* **20(9)**, 1407-1417 (2011).

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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