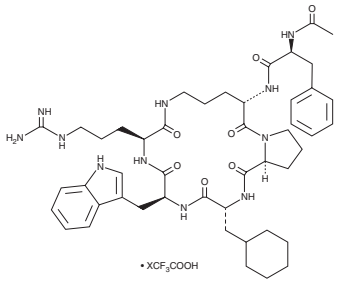
PRODUCT INFORMATION

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:	$C_{47}H_{65}N_{11}O_7 \bullet XCF_3COOH$
FW:	896.1
Purity:	≥95%
UV/Vis.:	λ_{max}: 220 nm
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

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 µM).[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).

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