

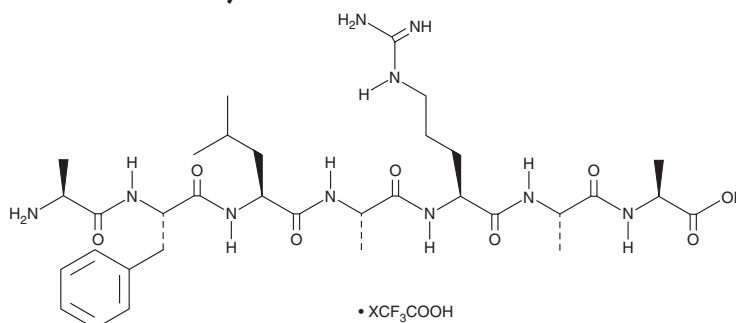
PRODUCT INFORMATION



Thrombin Receptor Peptide Ligand (trifluoroacetate salt)

Item No. 24995

Formal Name: L-alanyl-L-phenylalanyl-L-leucyl-L-alanyl-L-arginyl-L-alanyl-L-alanine, trifluoroacetate salt
Synonyms: AFLARAA, Ala-Phe-Leu-Ala-Arg-Ala-Ala
MF: $C_{33}H_{54}N_{10}O_8 \cdot XCF_3COOH$
FW: 718.8
Purity: $\geq 95\%$
Supplied as: A lyophilized powder
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

Thrombin receptor peptide ligand (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the thrombin receptor peptide ligand (trifluoroacetate salt) in water. The solubility of thrombin receptor peptide ligand (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Thrombin receptor peptide ligand is antagonist of the thrombin receptor ($EC_{50}s = 16-33 \mu M$ to inhibit platelet aggregation *in vitro*).¹ It inhibits α -thrombin and platelet aggregation induced by thrombin receptor activating peptide (TRAP; Item No. 24125) *in vitro* when used at a concentration of 32 μM but does not affect platelet aggregation induced by ADP or collagen. It also inhibits thrombin- and TRAP-induced proliferation of vascular smooth muscle cells (VSMCs).² Thrombin receptor peptide ligand (100 $\mu mol/kg$ bolus, i.v., plus 900 $\mu mol/kg$ infusion) inhibits arterial thrombosis in a rabbit model of partial carotid artery occlusion without increasing bleeding time.³

References

1. Pakala, R., Liang, T.C., and Benedict, C.R. A peptide ligand of the human thrombin receptor antagonizes thrombin receptor activating peptide and α -thrombin-induced platelet aggregation. *Fibrinolysis Proteol.* **14**(1), 15-21 (2000).
2. Pakala, R., Liang, C.T., and Benedict, C.R. A peptide analogue of thrombin receptor-activating peptide inhibits thrombin and thrombin-receptor-activating peptide-induced vascular smooth muscle cell proliferation. *J. Cardiovasc. Pharmacol.* **37**(5), 619-629 (2001).
3. Pakala, R., Liang, C.T., and Benedict, C.R. Inhibition of arterial thrombosis by a peptide ligand of the thrombin receptor. *Thromb. Res.* **100**(1), 89-96 (2000).

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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