

PRODUCT INFORMATION

Thrombin Receptor Agonist Peptide (trifluoroacetate salt)

Item No. 24710

Formal Name:	L-seryl-L-phenylalanyl-L-leucyl-L-leucyl-L-arginyl-L-asparaginyl-L-prolyl-L-asparaginyl-L- α -aspartyl-L-lysyl-L-tyrosyl-L- α -glutamyl-L-prolyl-L-phenylalanine, (trifluoroacetate salt)	H—Ser—Phe—Leu—Leu—Arg—Asn—Pro—Asn—Asp—Lys—Tyr—Glu—Pro—Phe—OH
Synonym:	TRAP-14	
MF:	$C_{81}H_{118}N_{20}O_{23} \cdot XCF_3COOH$	
FW:	1,739.9	
Purity:	$\geq 95\%$	$\cdot XCF_3COOH$
Supplied as:	A lyophilized powder	
Storage:	-20°C	
Stability:	≥ 4 years	

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

Laboratory Procedures

Thrombin receptor agonist peptide is supplied as a lyophilized powder. A stock solution may be made by dissolving the TRAP-14 (trifluoroacetate salt) in water. The solubility of TRAP-14 (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TRAP-14 (trifluoroacetate salt) is a 14-amino acid peptide agonist of the α -thrombin receptor.¹ It induces aggregation of washed platelets as well as platelets in citrated and hirudin plasma.² TRAP-14 (100 μ M) increases the cytosolic calcium concentration in isolated guinea pig pulmonary smooth muscle cells 5-fold over baseline.¹ It increases pulmonary arterial pressure in isolated guinea pig lung when used at a concentration of 1 μ M, which is comparable to the effect induced by 10 nM α -thrombin. TRAP-14 also induces contraction of isolated rat aortic rings and increases endothelin-1 (ET-1) levels in a dose-dependent manner, an effect that is reversed by the ET_A antagonist BQ-123 and the nitric oxide synthase (NOS) inhibitor L-NNA (Item No. 80220).³

References

1. Lum, H., Andersen, T.T., Fenton, J.W., II, *et al.* Thrombin receptor activation peptide induces pulmonary vasoconstriction. *Am. J. Physiol.* **266**(2 Pt. 1), C448-C454 (1994).
2. Galsa, E., Paintz, M., Zucker, T.P., *et al.* Thrombin receptor activating peptide-induced cellular effects: Comparative studies on human platelet activation and endothelium-dependent relaxation of porcine pulmonary arteries. *Agents Actions Suppl.* **45**, 303-307 (1995).
3. Magazine, H.I., Butt, O., and Yaghoutiel, H.R. Endothelin and nitric oxide release modulate aortic contraction to selected thrombin receptor agonists. *Am. J. Physiol.* **270**(6 Pt. 1), C1815-C1818 (1996).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM