



Product Information

Product ID E5222

CAS No. 117399-93-6

Chemical Name

Synonym Rat endothelin-3

Formula C₁₂₁H₁₆₈N₂₆O₃₃S₄

Formula Wt. 2643.1

Melting Point

Purity ≥95%

Solubility Soluble in water (1 mg/mL).

Store Temp -20° C

Ship Temp Ambient

Description Endothelin-3 is an endogenous peptide agonist at endothelin B (ET-B) receptors that exhibits anti-inflammatory, neuromodulatory, and pro-angiogenic activities. In animal models, endothelin-3 inhibits platelet-activating factor-induced edema. In other models, this peptide decreases tyrosine hydroxylase activity in an NO/cGMP/PKG-dependent manner, suppressing hypothalamic release of norepinephrine. In vitro, endothelin-3 activates ET-B receptors, increasing expression of VEGF, COX1/2, HIF-1 α , and PGE2.

H-Cys-Thr-Cys-Phe-Thr-Tyr-
Lys-Asp-Lys-Glu-Cys-Val-Tyr-
Tyr-Cys-His-Leu-Asp-Ile-Ile-
Trp-OH
(Cys1-Cys15, Cys3-Cys11)

Bulk quantities available upon request

Product ID	Size
E5222	0.5 mg
E5222	1 mg
E5222	2.5 mg

References Sato A, Ebina K. Endothelin-3 at low concentrations attenuates inflammatory responses via the endothelin B2 receptor. *Inflamm Res.* 2013 Apr;62(4):417-24. PMID: 23370722.

Spinella F, Rosanò L, Di Castro V, et al. Endothelin-1 and endothelin-3 promote invasive behavior via hypoxia-inducible factor -1 α in human melanoma cells. *Cancer Res.* 2007 Feb 15;67(4):1725-34. PMID: 17308114.

Morgazo C, Perfume G, Legaz G, et al. Involvement of nitric oxide pathways in short term modulation of tyrosine hydroxylase activity by endothelins 1 and 3 in the rat anterior hypothalamus. *Biochem Biophys Res Commun.* 2005 Sep 2;334(3):796-802. PMID: 16023617.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.