

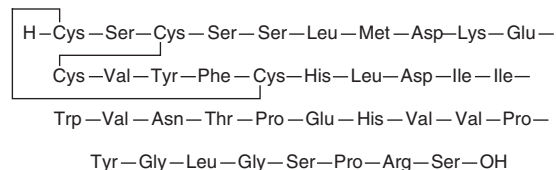
PRODUCT INFORMATION



Big Endothelin-1 (1-38) (human) (trifluoroacetate salt)

Item No. 24959

Formal Name: L-cysteinyl-L-seryl-L-cysteinyl-L-seryl-L-seryl-L-leucyl-L-methionyl-L- α -aspartyl-L-lysyl-L- α -glutamyl-L-cysteinyl-L-valyl-L-tyrosyl-L-phenylalanyl-L-cysteinyl-L-histidyl-L-leucyl-L- α -aspartyl-L-isoleucyl-L-isoleucyl-L-tryptophyl-L-valyl-L-asparaginy-L-threonyl-L-prolyl-L- α -glutamyl-L-histidyl-L-valyl-L-valyl-L-prolyl-L-tyrosylglycyl-L-leucylglycyl-L-seryl-L-prolyl-L-arginyl-L-serine, cyclic (1 \rightarrow 15),(3 \rightarrow 11)-bis(disulfide), trifluoroacetate salt



Synonym: BET-1 (1-38) (human)
MF: C₁₈₉H₂₈₂N₄₈O₅₆S₅•XCF₃COOH
FW: 4,282.9
Purity: \geq 95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: \geq 4 years

• XCF₃COOH

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

Laboratory Procedures

Big endothelin-1 (BET-1) (1-38) (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the BET-1 (1-38) (human) (trifluoroacetate salt) in water. The solubility of BET-1 (1-38) (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

BET-1 (1-38) is a peptide precursor of endothelin-1 (Item No. 24127) produced by vascular smooth muscle and endothelium.¹ BET-1 is converted to endothelin-1 by endothelin-converting enzyme (ECE) and to endothelin-1 (1-31) by chymase.² It is also converted to endothelin-1 (1-32) by matrix metalloproteinase-2 (MMP-2).¹ BET-1 (50 pmol) induces vasoconstriction in isolated rat mesenteric arteries, an effect that is blocked by the MMP-2 antagonist TIMP-2. *In vivo*, BET-1 (0.1-10 nmol/kg, i.v.) dose-dependently increases blood pressure and bradycardia and leads to renal and hindquarter vasoconstriction in rats as well as abdominal constriction in mice (ED₅₀ = 0.043 mg/kg), effects that are reversed or prevented by the ECE inhibitor phosphoramidon (Item No. 15113).^{3,4} It also induces mesenteric vasoconstriction in rats.³ Unlike endothelin-1, BET-1 (100 pmol/kg, i.v.) increases water and sodium excretion in rats independent of the endothelin A receptor.⁵

References

1. Fernandez-Patron, C., Radomski, M.W., and Davidge, S.T. *Circ. Res.* **85(10)**, 906-911 (1999).
2. D'Orléans-Juste, P., Plante, M., Honoré, J.C., et al. *J. Physiol. Pharmacol.* **81(6)**, 503-510 (2003).
3. Gardiner, S.M., Compton, A.M., Kemp, P.A., et al. *Br. J. Pharmacol.* **103(4)**, 2009-2015 (1991).
4. Raffa, R.B. and Jacoby, H.I. *Life Sci.* **48(17)**, PL85-PL90 (1991).
5. Pollock, D.M. and Opgenorth, T.J. *Br. J. Pharmacol.* **111(3)**, 729-732 (1994).

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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