

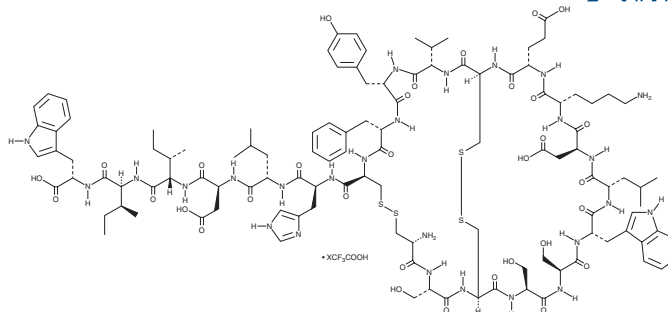
# PRODUCT INFORMATION



## Endothelin-2 (human) (trifluoroacetate salt)

Item No. 24412

**Synonym:** ET-2 (human)  
**MF:** C<sub>115</sub>H<sub>160</sub>N<sub>26</sub>O<sub>32</sub>S<sub>4</sub> • XCF<sub>3</sub>COOH  
**FW:** 2,546.9  
**Purity:** ≥95%  
**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

Endothelin-2 (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the endothelin-2 (human) (trifluoroacetate salt) in water. The solubility of endothelin-2 (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Endothelin-2 is a peptide vasoconstrictor and ligand for the endothelin (ET) receptors ET<sub>A</sub> and ET<sub>B</sub> (K<sub>b</sub>s = 32.8 and 1.33 nM, respectively).<sup>1</sup> It induces β-arrestin recruitment in CHO-K1 cells expressing human ET<sub>A</sub> and ET<sub>B</sub> (pD<sub>2</sub>s = 8.75 and 8.55, respectively). *Ex vivo*, endothelin-2 induces vasoconstriction in isolated rat mesenteric arterial beds (ED<sub>50</sub> = 90.8 pmol).<sup>2</sup> Endothelin-2 also induces contraction of isolated rat uteri, an effect which is reversed by the ET<sub>A</sub> antagonist BQ-123 but not the ET<sub>B</sub> antagonist BQ-788 (Item No. 17403).<sup>3</sup> Infusion of endothelin-2 restores vasoconstriction of vessels at the follicular apex of the ovarian follicle and ovulation in Amhr2<sup>cre/+</sup>Smc2 mice.<sup>4</sup>

### References

- Maguire, J.J., Kuc, R.E., Pell, V.R., *et al.* Comparison of human ET<sub>A</sub> and ET<sub>B</sub> receptor signalling via G-protein and β-arrestin pathways. *Life Sci.* **91(13-14)**, 544-549 (2012).
- Douglas, S.A. and Hiley, C.R. Endothelium-dependent vascular activities of endothelin-like peptides in the isolated superior mesenteric arterial bed of the rat. *Br. J. Pharmacol.* **101(1)**, 81-88 (1990).
- Kousides, M., Story, M.E., and Pennefather, J.N. Endopeptidase 24.11 inhibition does not modify uterotonic effects of endothelins in rat uterus. *Peptides* **19(9)**, 1585-1593 (1998).
- Migone, F.F., Cowan, R.G., Williams, R.M., *et al.* *In vivo* imaging reveals an essential role of vasoconstriction in rupture of the ovarian follicle at ovulation. *Proc. Natl. Acad. Sci. U.S.A.* **113(8)**, 2294-2299 (2016).

#### 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