

PRODUCT INFORMATION



[D-Trp⁸]-γ-MSH (trifluoroacetate salt)

Item No. 14037

Formal Name: L-tyrosyl-L-valyl-L-methionylglycyl-L-histidyl-L-phenylalanyl-L-arginyl-D-tryptophyl-L-α-aspartyl-L-arginyl-L-phenylalanyl-glycine, trifluoroacetate salt

MF: C₇₄H₉₉N₂₁O₁₆S • XCF₃COOH

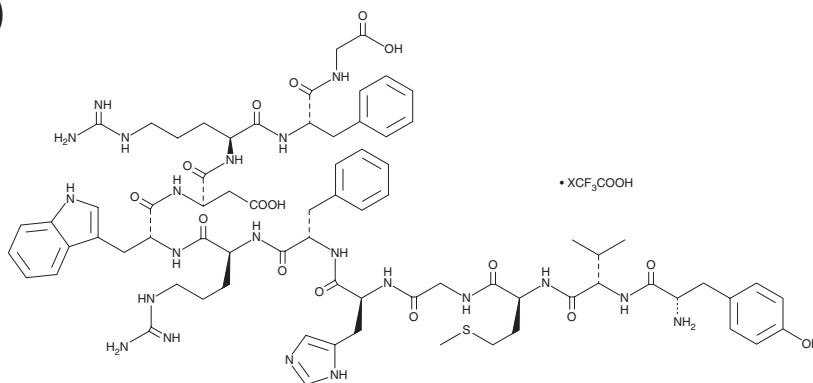
FW: 1,570.8

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

[D-Trp⁸]-γ-MSH (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the [D-Trp⁸]-γ-MSH (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

[D-Trp⁸]-γ-MSH is a melanocortin receptor 3 (MC3R) agonist and an analog of γ-melanocyte-stimulating hormone (γ-MSH).¹ It selectively induces cAMP accumulation in cells expressing MC3R over cells expressing MC4R or MC5R (EC₅₀s = 0.33, 100, and 82 nM, respectively, for the human receptors). *In vivo*, [D-Trp⁸]-γ-MSH (162 nmol/kg, i.v.) reduces the incidence of ventricular tachycardia, ventricular fibrillation, and death in a rat model of myocardial ischemia-reperfusion injury.² It also inhibits urate-induced chemokine (C-X-C) motif ligand 1 (CXCL1) release and peritoneal polymorphonuclear leukocyte accumulation in recessive yellow (e/e) mice with a non-functional MC1R.³

References

- Grieco, P., Balse, P.M., Weinberg, D., *et al.* D-Amino acid scan of γ-melanocyte-stimulating hormone: Importance of Trp⁸ on human MC3 receptor selectivity. *J. Med. Chem.* **43**(26), 4998-5002 (2000).
- Mioni, C., Giuliani, D., Cainazzo, M.M., *et al.* Further evidence that melanocortins prevent myocardial reperfusion injury by activating melanocortin MC₃ receptors. *Eur. J. Pharmacol.* **477**(3), 227-234 (2003).
- Getting, S.J., Lam, C.W., Leoni, G., *et al.* [D-Trp⁸]-γ-melanocyte-stimulating hormone exhibits anti-inflammatory efficacy in mice bearing a nonfunctional MC1R (recessive yellow e/e mouse). *Mol. Pharmacol.* **70**(6), 1850-1855 (2006).

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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