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Produktinformation

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- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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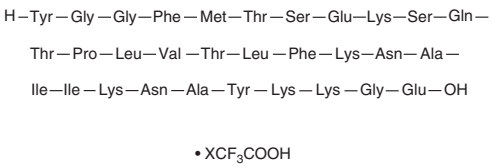
PRODUCT INFORMATION

β-Endorphin (human) (trifluoroacetate salt)

Item No. 24955

Formal Name: L-tyrosylglycylglycyl-L-phenylalanyl-L-methionyl-L-threonyl-L-seryl-L-a-glutamyl-L-lysyl-L-seryl-L-glutaminyl-L-threonyl-L-prolyl-L-leucyl-L-valyl-L-threonyl-L-leucyl-L-phenylalanyl-L-lysyl-L-asparaginyl-L-alanyl-L-isoleucyl-Lisoleucyl-L-lysyl-L-asparaginyl-L-alanyl-L-tyrosyl-L-lysyl-L-lysylglycyl-L-glutamic acid, trifluoroacetate salt



Synonym: β-Lipotropin (61-91)
MF: $C_{158}H_{251}N_{39}O_{46}S \bullet XCF_3COOH$
FW: 3,465.0
Purity: ≥95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

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

Description

β-Endorphin is an endogenous 31-amino acid neuropeptide and opioid receptor agonist that binds to μ-, δ-, and κ-opioid receptors (K_is = 3.73, 5.02, and 32.7 nM, respectively, in COS-1 cells expressing rat receptors).[1] It binds to rat and mouse brain membrane preparations (IC_{50}s = 0.33 and 0.67 nM, respectively) and induces chemotaxis of human monocytes *in vitro* when used at a concentration of 0.1 pM.[2-4] Intracerebroventricular administration of β-endorphin increases the latency to tail withdrawal in response to thermal stimuli in mice with a median antinociceptive dose (AD_{50}) value of 27 pmol per animal.[2] It also increases preference for the drug-paired place in a conditioned place preference test when administered to rats intracerebroventricularly at a dose of 5 μg.[5]

References

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3. Garzón, J. and Sánchez-Blázquez, P. αN-acetyl derivatives of β-endorphin-(1-31) and -(1-27) regulate the supraspinal antinociceptive activity of different opioids in mice. *Life Sci.* **48(14)**, 1417-1427 (1991).
4. Sacerdote, P. and Panerai, A.E. Analysis of the beta-endorphin structure-related activity on human monocyte chemotaxis: Importance of the N- and C-terminal. *Peptides* **10(3)**, 565-569 (1989).
5. Bals-Kubik, R., Herz, A., and Shippenberg, T.S. β-endorphin-(1-27) is a naturally occurring antagonist of the reinforcing effects of opioids. *Naunyn Schmiedebergs Arch. Pharmacol.* **338(4)**, 392-396 (1988).

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