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PRODUCT INFORMATION

β-Endorphin (1-27) (human) (trifluoroacetate salt)

Item No. 24957

MF:	$C_{139}H_{217}N_{33}O_{40}S \bullet XCF_3COOH$
FW:	3,022.5
Purity:	≥95%
Supplied as:	A lyophilized powder
Storage:	-20°C
Stability:	≥2 years

H—Tyr—Gly—Gly—Phe—Met—Thr—Ser—Glu—Lys—Ser—
Gln—Thr—Pro—Leu—Val—Thr—Leu—Phe—Lys—Asn—
Ala—Ile—Ile—Lys—Asn—Ala—Tyr—OH

• XCF_3COOH

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

Laboratory Procedures

β-Endorphin (1-27) (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the β-endorphin (1-27) (human) (trifluoroacetate salt) in the solvent of choice. β-Endorphin (1-27) (human) (trifluoroacetate salt) is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 1 mg/ml.

Description

β-Endorphin (1-27) is an endogenous peptide that binds to μ-, δ-, and κ-opioid receptors (K_is = 5.31, 6.17, and 39.82 nM, respectively, in COS-1 cells expressing rat receptors).[1] It binds to rat and mouse brain membrane preparations (IC_{50}s = 1.1 and 5.7 nM, respectively) and induces chemotaxis of human monocytes *in vitro* when used at a concentration of 1 nM.[2-4] Intracerebroventricular administration of β-endorphin (1-27) increases the latency to tail withdrawal in response to thermal stimulation in mice with a median antinociceptive dose (AD_{50}) of 1,500 pmol per animal.[2] It inhibits antinociception induced by β-endorphin (Item Nos. 24153 | 24955) in mice in response to thermal stimuli when administered at a dose of 65 pmol per animal. In rats, β-endorphin (1-27) does not affect drug-associated place preference when administered at doses up to 20 μg, i.c.v., but inhibits β-endorphin-induced place preference when administered at a dose of 10 μg per animal.[5]

References

1. Mansour, A., Hoversten, M.T., Taylor, L.P., *et al.* The cloned μ, δ and κ receptors and their endogenous ligands: Evidence for two opioid peptide recognition cores. *Brain Res.* **700(1-2)**, 89-98 (1995).
2. Hammonds, R.G., Jr., Nicolas, P., and Li, C.H. β-Endorphin-(1-27) is an antagonist of β-endorphin analgesia. *Proc. Natl. Acad. Sci. U.S.A.* **81(5)**, 1389-1390 (1984).
3. Garzón, J. and Sánchez-Blázquez, P. $^{\alpha}$N-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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