

PRODUCT INFORMATION



Acetyl β -Endorphin (human) (trifluoroacetate salt)

Item No. 24953

Synonym:	N-acetyl β -endorphin	
MF:	$C_{160}H_{253}N_{39}O_{47}S \cdot XCF_3COOH$	Ac—Tyr—Gly—Gly—Phe—Met—Thr—Ser—Glu—Lys—Ser—Gln—
FW:	3,507.0	Thr—Pro—Leu—Val—Thr—Leu—Phe—Lys—Asn—Ala—
Purity:	$\geq 95\%$	Ile—Ile—Lys—Asn—Ala—Tyr—Lys—Lys—Gly—Glu—OH
Supplied as:	A lyophilized powder	• XCF_3COOH
Storage:	-20°C	
Stability:	≥ 4 years	

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

Laboratory Procedures

Acetyl β -endorphin (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the acetyl β -endorphin (human) (trifluoroacetate salt) in water. The solubility of acetyl 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

Acetyl β -endorphin is an acetylated derivative of β -endorphin that binds to opioid receptors in rat caudal dorsomedial medulla ($K_i = 490$ nM) and mouse brain membrane preparations ($IC_{50} = 109$ nM).^{1,2} It induces chemotaxis of human monocytes *in vitro* when used at a concentration of 0.1 nM.³ *In vivo*, it reduces antinociception in mice induced by β -endorphin (Item Nos. 24153 | 24955), morphine, [D-Ala₂, N-Me-Phe₄, Gly₅-ol]-enkephalin (DAMGO; Item No. 21553), and [D-Ala₂, D-Leu₅]-enkephalin (DADLE) in a tail-flick test (ED_{50} s = 2.08, 33.11, 0.03, and 0.07 mol per animal, respectively).¹

References

1. D'Souza, M.M. and Carr, J.A. Characterization of [125I] β -endorphin binding sites in the rat caudal dorsomedial medulla. *Peptides* **19**(5), 931-937 (1998).
2. 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).
3. 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).

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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