



**SZABO
SCANDIC**

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



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	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—Lys—Lys—Gly—Glu—OH • XCF ₃ COOH
Synonym:	β-Lipotropin (61-91)	
MF:	C ₁₅₈ H ₂₅₁ N ₃₉ O ₄₆ S • XCF ₃ COOH	
FW:	3,465.0	
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

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_i s = 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

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. 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).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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