
Product Data Sheet

Product Name: β -Endorphin, human

Cat. No.: GC31117

Chemical Properties

Cas. No. 61214-51-5

SMILES 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

Formula C₁₅₈H₂₅₁N₃₉O₄₆S M.Wt 3464.98

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

β -Endorphin, human, a prominent endogenous peptide, existing in the hypophysis cerebri and hypothalamus, is an agonist of opioid receptor, with preferred affinity for μ -opioid receptor and δ -opioid receptor; β -Endorphin, human exhibits antinociception activity.

β -Endorphin, human is an agonist of opioid receptor, with preferred affinity for μ -opioid receptor and δ -opioid receptor. β -Endorphin exhibits anti-nociception activity by stimulating ϵ -opioid receptor, rather than μ -, δ -, and κ -opioid receptor[1]. β -Endorphin has anti-nociception activity. Firstly, β -Endorphin combines together with the opioid receptors in hyperalgesia. Further, β -Endorphin suppresses the release of substance P at the level of spinal cord and blocks the conduction of pain on the primary sensory neurons. Moreover, β -Endorphin activates the endogenous analgesia system located in the CNS. In addition, β -Endorphin inhibits the conduction of pain and agitation of nociceptors to exert an analgesic effect[2].

[1]. Narita M, et al. Evidence for the existence of the beta-endorphin-sensitive "epsilon-

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

opioid receptor" in the brain: the mechanisms of epsilon-mediated antinociception. Jpn J Pharmacol. 1998 Mar;76(3):233-53. [2]. Luan YH, et al. Action of β -endorphin and nonsteroidal anti-inflammatory drugs, and the possible effects of nonsteroidal anti-inflammatory drugs on β -endorphin. J Clin Anesth. 2017 Feb;37:123-128.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA