

Cat# SP-100526-1
Description: Ac-β- Endorphin, bovine, camel, ovine
Sequence: Ac-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-His-Lys-Lys-Gly-Gln (MW: 3480.1)
Size: 1 mg
Purity: >95%
Store: Desiccated at -20oC.

Endorphins are opioid neuropeptides produced endogenously by the pituitary gland and hypothalamus in the brain. They are polypeptides and they act like an analgesic during times of stress and pain as they function like opiates binding to the body's opioid receptors. Endorphins can also be called as neurotransmitters which act as inhibitors of pain signals. The activities of endorphins are analogous to the activity of the corticosteroid hormones.

There are more than 20 endorphins found in the human body. Alpha, beta and neo-endorphins function similarly but vary in amino acid sequences and their precursor molecules. Endorphins are derived from Proenkephalin while alpha and beta-neo-endorphins are derived from prodynorphin. Beta-endorphins are also agonists for opium receptors and they serve to reduce growth of cancer cells. Alpha neo-endorphins have a decapeptide structure and it is present in the hypothalamus region of the brain, spinal cord and low percentage is seen in the cortical structures of rats. Neo-endorphins might influence sensory functions due to its heterogeneous presence throughout the body. They also regulate the release of anti-diuretic hormone which when released in the blood helps in water re-absorption from kidneys and when released in the brain affects the social behavior.

Alpha-Endorphin:

Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr.

Beta-Endorphin:

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.

Alpha-Neo-endorphin:

Tyr-Gly-Gly-Phe-Leu-Arg-Lys-Tyr-Pro-Lys.

References: Ito,S., (1981) Life Sci. 29: 1457-146; Nadav, Z., (1983) J. Neurosci 5: 1240-1247; H. Imura (1985) J. Endocrinol 107: 147-157

All peptides are for in vitro research use only.

Please consult "Frequently asked questions" section at our website for Guidance on storage and solubility of the peptides. http://www.4adi.com/commerce/info/showpage.jsp?page_id=1088&category_id=2427

Related Items

Catalog#	ProdDescription
SP-87438-5	[Arg8]-a-Neo-Endorphin
SP-87439-1	[Des-Tyr1]-β-Endorphin, human
SP-87440-5	[Des-Tyr1]- g-Endorphin
SP-87446-5	[Met5, Lys6] a-Neo-Endorphin (1-6)
SP-87445-5	[Met5, Lys6,7] a-Neo-Endorphin (1-7)
SP-87443-5	[Met5, Lys6, Arg7] a-Neo-Endorphin (1-7)
SP-55153-1	x-Endorphin
SP-55161-1	Acetyl, a-Endorphin
SP-55281-1	B-Endorphin, Camel
SP-55282-1	B-Endorphinm Human
SP-55283-1	B-Endorphin, Rat
SP-100053-5	α-Neoendorphin (1-8)
SP-87431-5	α-Neo-Endorphin, porcine
SP-87433-5	α-Neo-Endorphin Analog
SP-87434-5	α-Neo-Endorphin (1-7)
SP-87425-1	β-Endorphin (1-5), (16-31), human
SP-85195-1	β-Endorphin, equine
SP-87423-1	β-Endorphin, porcine
SP-87426-1	β-Endorphin (1-27), human
SP-87427-1	β-Endorphin (1-27), camel, bovine, ovine
SP-87428-1	β-Endorphin (1-26), human
SP-89896-5	β-Endorphin (18-31) (human)
SP-89897-5	β-Endorphin (27-31) (human)
SP-89898-5	β-Endorphin (30-31) (human)
SP-87424-1	β-Endorphin (6-31), human
SP-87435-5	β-Neo-Endorphin
SP-87436-5	δ-Endorphin
SP-100526-1	Ac-β- Endorphin, bovine, camel, ovine
SP-87429-1	SP-89895-1 Ac-β-Endorphin (human)
SP-89899-1	Ac-d-Endorphin (bovine, camel, mouse, ovine)

SP-100053-5 120117S