

Ac-beta-Endorphin (human)

PRODUCT DESCRIPTION

Ac-beta-Endorphin (human) is a 33-amino-acid An endogenous opioid peptide involved in pain modulation, stress response, and reward signaling. Endorphins bind predominantly to mu-opioid receptors (MOR) and play critical roles in analgesia, euphoria, and neuroendocrine regulation. Used in neuroscience and pharmacology research for studying opioid receptor interactions, analgesic pathways, and the neurochemistry of pleasure and pain.

PRODUCT SPECIFICATIONS

Catalog Number	BPT1578
CAS Number	80102-04-1
Molecular Weight	3507.0088 Da
Molecular Formula	C160H253N39O47S1
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

Ac-YGGFMTSEKSQTPLVTLFKNAIIKNAYKKGE

Three-Letter Code:

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-Tyr-Lys-Lys-Gly-Glu-OH

RESEARCH APPLICATIONS

Application	Receptor binding
Biomarker Target	mu-Opioid Receptor (MOR)
Research Area	Neuroscience
Sub-category	Opioid Signaling & Pain

STORAGE & HANDLING

Storage Temperature	-20 deg C
Form	Lyophilized
Stability	Lyophilized product stable for 24 months at -20 deg C
Reconstitution	Reconstitute in sterile water or appropriate buffer
After Reconstitution	Aliquot and store at -20 to -80 deg C
Avoid	Repeated freeze-thaw cycles

AVAILABLE SIZES

Size Options	1 mg, 10 mg
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Usage

Research use

QUALITY CONTROL

Purity Method

HPLC, Mass Spectrometry (MS)

Identity

Confirmed by ESI-MS or MALDI-TOF

Purity

Peak Area by HPLC >=95%

Documentation

Certificate of Analysis (CoA) available upon request