

beta-Endorphin (1-5), (16-31), human

PRODUCT DESCRIPTION

beta-Endorphin (1-5), (16-31), human is a 21-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	BPT1562
Molecular Weight	2393.7936 Da
Molecular Formula	C112H173N27O29S1
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

YGGFMTLFKNAIK NAYKKGE

Three-Letter Code:

H-Tyr-Gly-Gly-Phe-Met-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
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