

beta-Endorphin (1-26), human

PRODUCT DESCRIPTION

beta-Endorphin (1-26), human is a 26-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    | BPT1565                              |
| Molecular Weight  | 2859.2908 Da                         |
| Molecular Formula | C130H208N32O38S1                     |
| Purity            | Peak Area by HPLC >=95%              |
| Form              | Lyophilized                          |
| Source            | Synthetic (Chemical Synthesis, SPPS) |
| Endotoxin         | N/A (Synthetic peptide)              |

AMINO ACID SEQUENCE

One-Letter Code:

YGGFMTSEKSQTPLVTLFKNAIIKNA

Three-Letter Code:

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-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 |