

Biotin-Neurokinin A

PRODUCT DESCRIPTION

Biotin-Neurokinin A is a 18-amino-acid A peptide related to the tachykinin/substance P family, an 11-amino-acid neuropeptide that signals through NK1 receptors to mediate pain transmission, inflammation, emesis, and neurogenic vasodilation. Widely used in pain, inflammation, and neuroscience research for studying nociception, neurogenic inflammation, and the development of NK1 receptor antagonists (e.g., aprepitant for chemotherapy-induced nausea).

PRODUCT SPECIFICATIONS

|                   |                                      |
|-------------------|--------------------------------------|
| Catalog Number    | BPT1490                              |
| Molecular Weight  | 1359.6122 Da                         |
| Molecular Formula | C60H94N16O16S2                       |
| Purity            | Peak Area by HPLC >=95%              |
| Form              | Lyophilized                          |
| Source            | Synthetic (Chemical Synthesis, SPPS) |
| Endotoxin         | N/A (Synthetic peptide)              |

AMINO ACID SEQUENCE

One-Letter Code:

Biotin-HKTDSFVGLM-NH2

Three-Letter Code:

Biotin-His-Lys-Thr-Asp-Ser-Phe-Val-Gly-Leu-Met-NH2

RESEARCH APPLICATIONS

|                  |                               |
|------------------|-------------------------------|
| Application      | Receptor binding              |
| Biomarker Target | Neurokinin Receptors (NK1-3R) |
| Research Area    | Neuroscience                  |
| Sub-category     | Tachykinin 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 |