Biotin-Substance P

PRODUCT DESCRIPTION

Biotin-Substance P is a 19-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	BPT1923
CAS Number	87468-58-4
Molecular Weight	1573.9209 Da
Molecular Formula	C73H112N20O15S2
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

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Biotin-RPKPQQFFGLM-NH2
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Three-Letter Code:

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Biotin-Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met-NH2
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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