

**Biotin-Neuromedin B**  
**Synthetic Peptide**  
**Catalog # SP3464b****Specification**

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**Biotin-Neuromedin B - Product Information**

Primary Accession	<a href="#">P01297</a>
Other Accession	<a href="#">Q9CR53</a> , <a href="#">P08949</a> , <a href="#">Q2T9U8</a>
Sequence	<b>Biotin-GNLWATGHFM-CONH2</b>

**Biotin-Neuromedin B - Additional Information****Gene ID** 100141313**Other Names**

Neuromedin-B, Neuromedin-B-32, Neuromedin-B-30, Neuromedin-B, NMB

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Biotin-Neuromedin B - Protein Information****Name** NMB**Function**

Stimulates smooth muscle contraction (PubMed:<a href="http://www.uniprot.org/citations/6882442" target="\_blank">6882442</a>). Induces sighing by acting directly on the pre-Botzinger complex, a cluster of several thousand neurons in the ventrolateral medulla responsible for inspiration during respiratory activity (By similarity). Contributes to the induction of sneezing following exposure to chemical irritants or allergens which causes release of NMB by nasal sensory neurons and activation of NMBR-expressing neurons in the sneeze-evoking region of the brainstem (By similarity). These in turn activate neurons of the caudal ventral respiratory group, giving rise to the sneezing response (By similarity). Contributes to induction of acute itch, possibly through activation of the NMBR receptor on dorsal root ganglion neurons (By similarity). Increases expression of NMBR and steroidogenic mediators STAR, CYP11A1 and HSD3B1 in Leydig cells, induces secretion of testosterone by Leydig cells and also promotes Leydig cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/29632025" target="\_blank">29632025</a>). Plays a role in the innate immune response to influenza A virus infection by enhancing interferon alpha expression and reducing expression of IL6 (By similarity). Plays a role in CSF1-induced proliferation of osteoclast precursors by contributing to positive regulation of the expression of the CSF1 receptor CSF1R (By similarity).

**Cellular Location**

Secreted {ECO:0000250|UniProtKB:Q9CR53}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q9CR53}. Note=In neurons of the retrotrapezoid nucleus//parafacial respiratory group, expressed on neuron projections which project into the pre-Botzinger complex. {ECO:0000250|UniProtKB:Q9CR53}

**Tissue Location**

Higher expression in the central nervous system (CNS) than in peripheral tissues. Highest levels are found in the olfactory bulb. Relatively high levels in the CNS (including the cerebral cortex, cerebellum, spinal cord, medulla oblongata, midbrain, hypothalamus, hippocampus, and hypophysis) and in peripheral tissues such as the pancreas, adrenal gland, testis, ovary and cecum. Moderate levels are found in the rectum, heart and pons with low expression levels detected in the bone marrow and duodenum. Other tissues show no or low levels of expression.

**Biotin-Neuromedin B - Images**