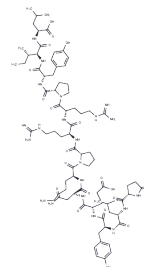


Neurotensin

Chemical Properties

CAS No. :	39379-15-2
Formula:	C78H121N21O20
Molecular Weight:	1672.92
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Neurotensin is a 13 amino acid neuropeptide that is implicated in the regulation of luteinizing hormone and prolactin release and has significant interaction with the dopaminergic system.
Targets(IC50)	Neurotensin Receptor
In vitro	Neurotensin induces the expression of inflammatory markers (MIP-2, MCP-1, IL-1 β , TNF α) in murine microglial cells and promotes IL-8 secretion in colon epithelial cells harboring the NTR, a high-affinity receptor belonging to the GPCR family, prevalent in many pancreatic and colorectal cancers. This suggests Neurotensin's potential endocrine role in tumor growth. Acting through NTR1, it activates several signal transduction pathways, including intracellular calcium levels, MAPKs (ERK, JNK), and PKC isoforms. In HCT116 cancer cells, Neurotensin dramatically enhances migration approximately threefold, an effect inhibited by Curcumin pretreatment. Additionally, Neurotensin's activation of the MEK/ERK pathway and subsequent upregulation of AP-1 transcription factors underscore its contribution to cell proliferation.

Solubility Information

Solubility	H2O: 36.43 mg/mL (21.78 mM), Sonication is recommended. DMSO: 10 mM, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5978 mL	2.9888 mL	5.9776 mL
5 mM	0.1196 mL	0.5978 mL	1.1955 mL
10 mM	0.0598 mL	0.2989 mL	0.5978 mL
50 mM	0.012 mL	0.0598 mL	0.1196 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Wang X, et al. Curcumin inhibits neurotensin-mediated interleukin-8 production and migration of HCT116 human colon cancer cells. Clin Cancer Res. 2006 Sep 15;12(18):5346-55.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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