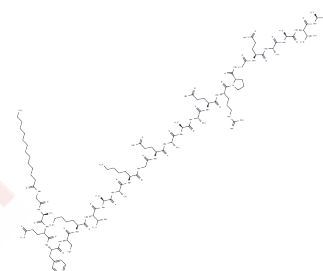


MANS peptide

Chemical Properties

CAS No. :	479482-23-0
Formula:	C111H184N30O35
Molecular Weight:	2498.83
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	MANS peptide inhibits myristoylated alanine-rich C kinase substrate (MARCKS) by competing for membrane binding in cells, thereby inhibiting mucin secretion stimulation and tumor metastasis [1].
Targets(IC50)	PKC
In vitro	MANS peptide, at concentrations of 0-100 μ M and incubation times of 12-24 hours, inhibits the migration and invasion of lung cancer cell lines CL1-0/F3, CL1-5, PC9, and A549 without causing toxicity to normal cells [1]. At a concentration range of 0-100 μ M for 16 hours, MANS peptide suppresses the phosphorylation of MARCKS, PI3K, and AKT, leading to changes in downstream Slug signaling and E-cadherin expression levels. This results in the prevention of loss of cell-cell adhesion and alters the epithelial-mesenchymal transition (EMT) characteristics of cancer cells, thereby reducing tumor metastasis [1]. Cell Viability Assay [1] shows inhibited migration in the cell lines CL1-0/F3, CL1-5, and PC9 at the specified concentrations and incubation times. Western Blot Analysis [1] on cell lines CL1-0/F3, CL1-5, PC9, and NHBE indicates upregulated levels of E-cadherin and downregulated levels of Slug, with suppressed MARCKS phosphorylation and AKT/Slug pathway activity.
In vivo	The MANS peptide, administered at a dosage of 50 nmol per injection via intraperitoneal injection every three days for a total of six doses, effectively inhibits tumor metastasis in a PC9 xenograft NOD/SCID mouse model without affecting tumorigenesis [1]. Animal Model: NOD/SCID mice model [1] Dosage: 50 nmol/injection Administration: Ip, every 3 days for 6 times Result: Suppressed micrometastatic lesions.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4002 mL	2.0009 mL	4.0019 mL
5 mM	0.080 mL	0.4002 mL	0.8004 mL
10 mM	0.040 mL	0.2001 mL	0.4002 mL
50 mM	0.008 mL	0.040 mL	0.080 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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