

Pep2-8

Chemical Properties

CAS No. : 1541011-97-5

Formula: C83H110N16O24

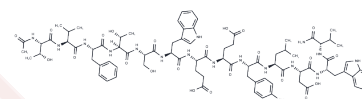
Molecular Weight: 1715.85

Keep away from moisture, Keep away from direct sunlight

Storage:

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Pep2-8 specifically inhibits PCSK9 activity with a KD of 0.7 μ M and an IC50 of 1.4 μ M.
Targets(IC50)	Others
In vitro	<p>Methods:</p> <p>Molecular binding experiments were conducted to verify the binding effect between Pep2-8 and C-terminally truncated PCSK9. A lipid metabolism damage model was established by treating HepG2 cells with PCSK9, and after treatment with 50 μM Pep2-8, the changes in the low-density lipoprotein (LDL) uptake capacity of the cells were detected.</p> <p>Results:</p> <p>Pep2-8 could specifically bind to the C-terminally truncated PCSK9. At a working concentration of 50 μM, Pep2-8 effectively reversed the abnormal cell function induced by PCSK9, restoring the LDL uptake capacity of HepG2 cells to approximately 90% of that in the control group [1].</p>
In vivo	<p>Methods:</p> <p>The binding ability between peptide Pep2-8 and C-terminally truncated PCSK9 was explored. HepG2 cells were treated with PCSK9 to induce functional damage, then treated with 50 μM Pep2-8, and the recovery of LDL uptake function of the cells was detected.</p> <p>Results:</p> <p>Pep2-8 could specifically bind to the C-terminally truncated PCSK9 in a targeted manner. After intervention with 50 μM Pep2-8, the LDL uptake capacity of HepG2 cells damaged by PCSK9 was significantly recovered, reaching approximately 90% of the activity of the normal control group [1].</p>

Solubility Information

Solubility	<p>PBS (pH 7.4): 2 mg/mL (1.17 mM), Sonication is recommended.</p> <p>DMSO: 80 mg/mL (46.62 mM)</p> <p>(< 1 mg/ml refers to the product slightly soluble or insoluble)</p>
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5828 mL	2.914 mL	5.828 mL
5 mM	0.1166 mL	0.5828 mL	1.1656 mL
10 mM	0.0583 mL	0.2914 mL	0.5828 mL
50 mM	0.0117 mL	0.0583 mL	0.1166 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

Yingnan Zhang, et al. Identification of a small peptide that inhibits PCSK9 protein binding to the low density lipoprotein receptor. J Biol Chem. 2014 Jan 10;289(2):94255

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481