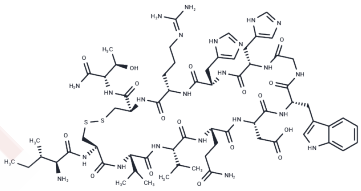
Data Sheet (Cat.No.TP1304)

TargetMol

Compstatin

Chemical Properties



CAS No. : 206645-99-0

Formula: C66H99N23O17S2

Molecular Weight: 1550.77

Storage: Keep away from moisture
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	Compstatin is a cyclic peptide consisting of 13 amino acid residues and is a potent inhibitor of complement system C3. Compstatin is species-specific and has inhibitory effects only on the complement system of primates. Studies have shown that it can bind to baboon C3 and is resistant to proteolytic cleavage in baboon blood. Its IC50 values for the classical pathway and alternative pathway are 63 μM and 12 μM, respectively.
Targets(IC50)	Complement System

Solubility Information

Solubility	DMSO: 115 mg/mL (74.16 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (6.45 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6448 mL	3.2242 mL	6.4484 mL
5 mM	0.129 mL	0.6448 mL	1.2897 mL
10 mM	0.0645 mL	0.3224 mL	0.6448 mL
50 mM	0.0129 mL	0.0645 mL	0.129 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

Soulika AM, et al. Inhibition of heparin/protamine complex-induced complement activation by Compstatin in baboons. Clin Immunol. 2000 Sep;96(3):212-21.
Niu Z, Wang M, Yan Y, et al.Challenges in the Development of NK-92 Cells as an Effective Universal Off-the-Shelf Cellular Therapeutic.The Journal of Immunology.2024, 213(9): 1318-1328.