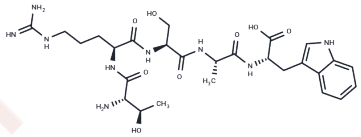
Data Sheet (Cat.No.T81592)

TargetMol

Osteostatin

Chemical Properties



CAS No. : 138949-73-2

Formula: C27H41N9O8

Molecular Weight: 619.67

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	Osteostatin, derived from parathyroid hormone-related protein (PTHrP) 107-111, has demonstrated properties conducive to bone repair in animal models presenting with bone defects and exhibits efficacy in mitigating bone erosion associated with inflammatory arthritis. Additionally, it possesses the capacity to inhibit both collagen-induced arthritis and direct osteoclastic bone resorption, marking its potential utility in inflammation and immunology research [1] [2] [3] [4].
Targets(IC50)	Thyroid hormone receptor(THR)
In vitro	Osteostatin (100, 250, 500 nM, 7-9 days) reduces osteoclast differentiation in a concentration-dependent manner [2].
In vivo	Osteostatin (80 or 120 μg/kg; subcutaneously injected daily post-onset of the disease for 13 days) reduced the severity of arthritis and cartilage and bone degradation[4].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6138 mL	8.0688 mL	16.1376 mL
5 mM	0.3228 mL	1.6138 mL	3.2275 mL
10 mM	0.1614 mL	0.8069 mL	1.6138 mL
50 mM	0.0323 mL	0.1614 mL	0.3228 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.

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