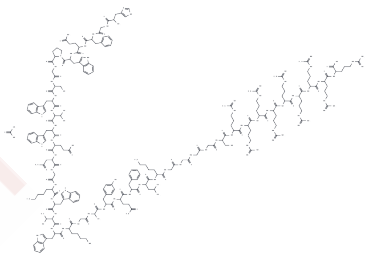
Data Sheet (Cat.No.TP2222L)

TargetMol

APTSTAT3-9R acetate

Chemical Properties



CAS No. :

Formula: C225H334N80O53

Molecular Weight: 5007.56

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	APTSTAT3-9R acetate is a selective peptide binding STAT3 with antiproliferative and antitumor activity. APTSTAT3-9R acetate and inhibits STAT3 activation and downstream signaling by specifically blocking STAT3 phosphorylation.
Targets(IC50)	STAT
In vitro	APTSTAT3-9R acetate (7.5, 15, and 30 μmol/L) significantly reduces STAT3-DNA-binding activity in a dose-dependent manner in human lung carcinoma cells (A549) but does not affect the level of AKT phosphorylation, indicating specificity of the aptide. APTSTAT3-9R acetate (30 μM) suppresses cell viability and proliferation of cancer cells and significantly suppresses colony formation. The IC50s are 10 to 20 μM in A549, B16F1, and HepG2 cells[1].
In vivo	In female BALB/c nude mice with A549 cells, APTSTAT3-9R acetate (8 mg/kg in 50 μL; intratumoral injection) suppresses tumor growth[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.1997 mL	0.9985 mL	1.997 mL
5 mM	0.0399 mL	0.1997 mL	0.3994 mL
10 mM	0.020 mL	0.0998 mL	0.1997 mL
50 mM	0.004 mL	0.020 mL	0.0399 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

Daejin Kim, et al. A Specific STAT3-binding Peptide Exerts Antiproliferative Effects and Antitumor Activity by Inhibiting STAT3 Phosphorylation and Signaling. Cancer Res. 2014 Apr 15;74(8):2144-51.

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