

APTSTAT3-9R

Chemical Properties

CAS No. :

Formula: C223H330N80O51

Molecular Weight: 4947.51

Keep away from moisture

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	APTSTAT3-9R-9R is a STAT3 inhibitor (Ki: 231 nmol/L). STAT3 has been reported to promote the proliferation, survival, metastasis, immune escape, as well as drug resistance of cancer cells, making it a promising target for various diseases. However, though multiple STAT3 inhibitors and its regulatory or effector pathway elements have been identified, bioactive agents are limited.
Targets(IC50)	Others,STAT
In vitro	In vitro: The previous study showed that APTSTAT3-9R bound to STAT3 with high specificity and affinity. Moreover, the addition of a cell-penetrating motif to the peptide to yield APTSTAT3-9R enabled uptake by murine B16F1 melanoma cells. In addition, treatment of various types of cancer cells with APTSTAT3-9R was able to inhibit STAT3 phosphorylation and reduce expression of STAT targets, such as Bcl-xL, cyclin D1, and survivin. As a result, APTSTAT3-9R could suppress the viability and proliferation of cancer cells [1].
In vivo	In vivo: In a previous animal in vivo study, a human lung carcinoma xenograft model was prepared by subcutaneous implantation of A549 cancer cells. After tumors had reached a volume of approximately 50 mm ³ after two weeks, APTSTAT3-9R was intratumorally injected every other day for a total of four injections. Results showed that the tumor burden was significantly reduced in the APTSTAT3-9R-treated group when compared with that in the control group; however, there was little difference in tumor size between APTscr-9R and control groups [1].

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.2021 mL	1.0106 mL	2.0212 mL
5 mM	0.0404 mL	0.2021 mL	0.4042 mL
10 mM	0.0202 mL	0.1011 mL	0.2021 mL
50 mM	0.004 mL	0.0202 mL	0.0404 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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