APTSTAT3-9R

Catalog No.C13258 Batch:C1325803

Product Datasheet

Technical Data

Formula	$C_{223}H_{330}N_{80}O_{51}$		
Molecular Weight	4947.51	**CAS No.**	no CAS
Solubility (25°C)*	In vitro	Water	100 mg/mL (20.21 mM)

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume \ Mass	1 mg	5 mg	10 mg
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	-	-	-

Biological Activity

Description	APTSTAT3-9R is a specific STAT3-binding peptide with addition of a cell-penetrating motif. The treatment of this compound in various types of cancer cells blocks STAT3 phosphorylation and reduces expression of STAT targets.
Targets	STAT3 [1] (In A549 cells)
In vitro	APTSTAT3-9R effectively inhibited phosphorylation of STAT3 but did not affect the level of AKT phosphorylation and it suppresses cell viability and proliferation of cancer cells[1].
In vivo	APTSTAT3-9R could effectively suppress tumor growth in the in vivo allograft and xenograft tumor models by inhibiting STAT3 phosphorylation[1].

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  A549 cells
- **Concentrations**
  0-100 μmol/L
- **Incubation Time**
  12 h
- **Method**
  Cells are plated in a 96-well plate (5,000 cells/well) and incubated for 12 hours. After incubation the cells are treated with nine-arginine (9R), APTSTAT3-9R, and this compound for 12 hours. After 12 hours incubation, 20 μL MTT (5 mg/mL) is added to each well. After 4 hours, 100 μL dimethyl sulfoxide is added to each well, and absorbance is measured at 570 nm using a Spectra Macplus microplate reader

Animal Study:[1]

- **Animal Models**
  Human lung carcinoma xenograft model(by subcutaneous implantation of A549 cancer cells into female BALB/c nude mice)
- **Dosages**
  8 mg/kg
- **Administration**
  intratumoral injection

References

https://pubmed.ncbi.nlm.nih.gov/24576829/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

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