

STAT3-IN-11

Chemical Properties

CAS No. : 2503096-50-0

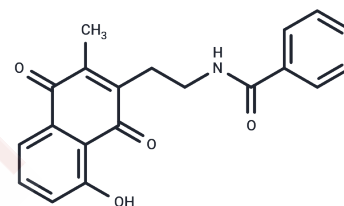
Formula: C₂₀H₁₇NO₄

Molecular Weight: 335.35

Store at low temperature

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	STAT3-IN-11 is a selective STAT3 inhibitor with inhibitory effects on phosphorylation of the STAT3pTyr705 site and phosphorylation of Survivin. STAT3-IN-11 promotes apoptosis in cancer cells and is a candidate compound for the treatment of cancer.
Targets(IC50)	Apoptosis, STAT
In vitro	STAT3-IN-11 (2.5-10µM, 6 hours) dose-dependently inhibits phosphorylation of STAT3 at the pTyr705 site stimulated by IL-6 in MDA-MB-231 cells. However, it does not affect the phosphorylation of upstream kinases such as p-JAK2 and p-Src, nor the phosphorylation of STAT1, a STAT subtype.

Solubility Information

Solubility	DMSO: 80 mg/mL (238.56 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.982 mL	14.9098 mL	29.8196 mL
5 mM	0.5964 mL	2.982 mL	5.9639 mL
10 mM	0.2982 mL	1.491 mL	2.982 mL
50 mM	0.0596 mL	0.2982 mL	0.5964 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

Li N, et al. Design, synthesis and biological evaluation of novel plumbagin derivatives as potent antitumor agents with STAT3 inhibition. Bioorg Chem. 2020 Nov;104:104208.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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