

NTZ-24

Chemical Properties

CAS No. :	69819-42-7
Formula:	C ₁₀ H ₅ Cl ₂ N ₃ O ₃ S
Molecular Weight:	318.14
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	NTZ-24 is a selective STAT3 pathway inhibitor. NTZ-24 suppresses STAT3 phosphorylation at Tyr705, inhibits STAT3-DNA interactions, and downregulates the expression levels of STAT3 downstream target proteins. NTZ-24 induces cell-cycle arrest and promotes apoptosis in cancer cells. NTZ-24 exhibits significant antiproliferative activity against HeLa cells with an IC ₅₀ value of 3.3 μM. NTZ-24 is applicable to cervical cancer research and investigations involving STAT3-mediated oncogenic signaling pathways.
Targets(IC ₅₀)	STAT
In vitro	NTZ-24 (10 μM, 20 h) exhibits activities of STAT3 pathway activation with IC ₅₀ value of 0.8±0.04 μM in HEK-Blue IL-6 cells[1]. NTZ-24 (48 h) exhibits HeLa cell proliferation with IC ₅₀ value of 3.3±0.8 μM by MTT assay[1]. NTZ-24 (10 μM and 50 μM, 48 h) has low cytotoxicities and results in only about a 19% cell growth inhibition in HEK293T cell[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1433 mL	15.7164 mL	31.4327 mL
5 mM	0.6287 mL	3.1433 mL	6.2865 mL
10 mM	0.3143 mL	1.5716 mL	3.1433 mL
50 mM	0.0629 mL	0.3143 mL	0.6287 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

Lü Z, et al. Structure-Activity Study of Nitazoxanide Derivatives as Novel STAT3 Pathway Inhibitors. ACS Med Chem Lett. 2021 Apr 1;12(5):696-703.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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