

NCT-58

Chemical Properties

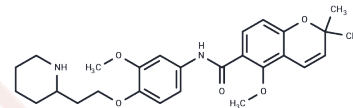
CAS No. : 2411429-33-7

Formula: C₂₇H₃₄N₂O₅

Molecular Weight: 466.57

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	NCT-58 is a potent C-terminal HSP90 inhibitor. NCT-58 does not induce the heat shock response (HSR). NCT-58 elicits anti-tumor activity via the simultaneous downregulation of HER family members as well as inhibition of Akt phosphorylation. NCT-58 kills Trastuzumab-resistant breast cancer stem-like cells. NCT-58 induces apoptosis in HER2-positive breast cancer cells.
Targets(IC50)	Apoptosis,HSP
In vitro	NCT-58 treatment (0.1-10 μ M;72 hours) increases the number of early and late apoptotic cells in HER2-positive BT474 and SKBR3 cells. NCT-58 treatment (0.1-20 μ M;72 hours) dose-dependently reduces cell viability in HER2-positive BT474 and SKBR3 cells. NCT-58 treatment (2-10 μ M;72 hours) effectively reduced the levels of truncated p95HER2 and its phosphorylated form, as well as downregulation of Akt and phospho-Akt (Ser473) protein contents in JIMT-1 and MDA-MB-453 cells [1].
In vivo	NCT-58 (30mg/kg; i.p.; every other day for 47 days) significantly impedes tumor growth, markedly reduces tumor weight, and effectively suppresses Trastuzumab-resistant tumor growth [1].

Solubility Information

Solubility	DMSO: 40 mg/mL (85.73 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	2.1433 mL	10.7165 mL	21.433 mL
5 mM	0.4287 mL	2.1433 mL	4.2866 mL
10 mM	0.2143 mL	1.0717 mL	2.1433 mL
50 mM	0.0429 mL	0.2143 mL	0.4287 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

Park S, et al. The C-terminal HSP90 inhibitor NCT-58 kills trastuzumab-resistant breast cancer stem-like cells. Cell Death Discov. 2021;7(1):354.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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