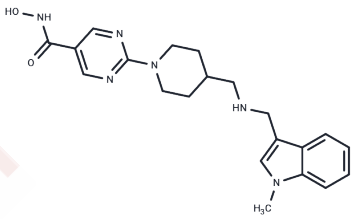
Data Sheet (Cat.No.T6055)

TargetMol

Quisinostat

Chemical Properties



CAS No. : 875320-29-9

Formula: C21H26N6O2

Molecular Weight: 394.47

Storage: Store at low temperature
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	Quisinostat (JNJ-26481585) (JNJ-26481585) is a novel second-generation HDAC inhibitor with highest potency for HDAC1 with IC50 of 0.11 nM, modest potent to HDACs 2, 4, 10, and 11; greater than 30-fold selectivity against HDACs 3, 5, 8, and 9 and lowest potency to HDACs 6 and 7.
Targets(IC50)	Apoptosis,HDAC,Autophagy
In vitro	Quisinostat exerts broad-spectrum antiproliferative activity against a wide panel of cancer cell lines including lung, colon, breast, prostate, and ovarian cell lines at nanomolar concentrations. JNJ-26481585 shows activity toward all HDAC enzymes tested with highest potency in vitro observed toward recombinant HDAC1 (IC50, 0.11±0. 03 nM), which is comparable with the potency observed toward HDAC1-immunoprecipitated complexes from tumor cells (IC50, 0.16±0.02 nM). Lowest in vitro potency is observed toward HDAC6, 7 and 9 (IC50, 32.1-119 nM) [1].
In vivo	Quisinostat induces continuous H3 acetylation in tumor tissue in vivo. Quisinostat, a "second-generation" HDAC inhibitor with prolonged pharmacodynamic response in vivo. In agreement with the hypothesis, Quisinostat showed superior efficacy compared with both standard of care agents and first-generation HDAC inhibitors in preClinicalal tumor models. These studies suggest that an HDAC inhibitor with continuous pharmacodynamic activity may show activity in solid tumor malignancies[1].

Solubility Information

Solubility	DMSO: 126.25 mg/mL (320.05 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.07 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.535 mL	12.6752 mL	25.3505 mL
5 mM	0.507 mL	2.535 mL	5.0701 mL
10 mM	0.2535 mL	1.2675 mL	2.535 mL
50 mM	0.0507 mL	0.2535 mL	0.507 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

Arts J, et al. JNJ-26481585, a novel "second-generation" oral histone deacetylase inhibitor, shows broad-spectrum preclinical antitumoral activity. Clin Cancer Res. 2009 Nov 15;15(22):6841-51.
Lidsky M E, Wang Z, Lu M, et al. Leveraging patient derived models of FGFR2 fusion positive intrahepatic cholangiocarcinoma to identify synergistic therapies. npj Precision Oncology. 2022, 6(1): 1-17.