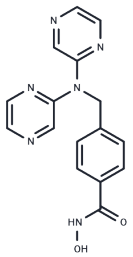
Data Sheet (Cat.No.T9148)

TargetMol
YOUR TARGET MOLECULES

KA2507

Chemical Properties



CAS No. : 1636894-46-6

Formula: C16H14N6O2

Molecular Weight: 322.32

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	KA2507 is a potent and selective HDAC6 inibitor with an IC50 of 2.5nM.
Targets(IC50)	HDAC
In vitro	At concentrations selective for HDAC6 inhibition, KA2507 did not inhibit in vitro proliferation of mouse or human cancer cells.
In vivo	KA2507 (100-200 mg/kg; p.o.; daily; for 20 days) inhibits tumor growth in the syngeneic B16-F10 mouse melanoma model. KA2507 also demonstrates antitumor efficacy in CT26 and MC38 colorectal cancer models. Analysis of tumor samples also indicates modulation of biomarkers of antitumor immunity at efficacious dosing, with KA2507 administration resulting in reduced STAT3 activation (as measured by phospho-STAT3, an important suppressor of the antitumor immune response), reduced PD-L1 expression, and increased expression of MHC class I. KA2507 exhibits poor oral bioavailability (mice 15%) and Cmax (mice 300 ng/mL) following oral administration (mice 200 mg/kg).[1]

Solubility Information

Solubility	DMSO: 60 mg/mL (186.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1025 mL	15.5125 mL	31.0251 mL
5 mM	0.6205 mL	3.1025 mL	6.205 mL
10 mM	0.3103 mL	1.5513 mL	3.1025 mL
50 mM	0.0621 mL	0.3103 mL	0.6205 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.

Reference

Apostolia M Tsimberidou, et al. Preclinical Development and First-in-Human Study of KA2507, a Selective and Potent Inhibitor of Histone Deacetylase 6, for Patients with Refractory Solid Tumors. Clin Cancer Res. 2021 May 4.