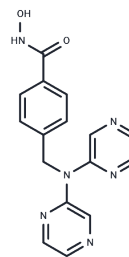


KA2507

## Chemical Properties

CAS No. : 1636894-46-6  
 Formula: C<sub>16</sub>H<sub>14</sub>N<sub>6</sub>O<sub>2</sub>  
 Molecular Weight: 322.32  
 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	KA2507 is a potent and selective HDAC6 inhibitor with an IC <sub>50</sub> of 2.5nM.
Targets(IC <sub>50</sub> )	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 and shows antitumor efficacy in CT26 and MC38 colorectal cancer models. Tumor sample analysis reveals that at efficacious doses, KA2507 modulates biomarkers of antitumor immunity, resulting in reduced STAT3 activation (measured by phospho-STAT3), decreased PD-L1 expression, and increased MHC class I expression. However, KA2507 exhibits poor oral bioavailability (mice 15%) and C <sub>max</sub> (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)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.21 mM),Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

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	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

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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

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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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