

ACY-957

## Chemical Properties

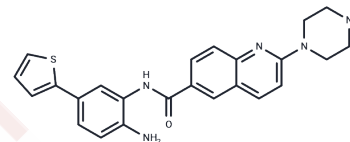
CAS No. : 1609389-52-7

Formula: C<sub>24</sub>H<sub>23</sub>N<sub>5</sub>O<sub>5</sub>

Molecular Weight: 429.54

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	ACY-957 (HDAC Inhibitor C001) is an orally active and selective inhibitor of HDAC1 and HDAC2 (IC <sub>50</sub> s: 7 nM, 18 nM, and 1300 nM against HDAC1/2/3) and shows no inhibition on HDAC4/5/6/7/8/9.
Targets(IC <sub>50</sub> )	HDAC
In vitro	ACY-957 is a selective inhibitor of HDAC1 and HDAC2, with IC <sub>50</sub> values of 7 nM for HDAC1, 18 nM for HDAC2, and 1300 nM for HDAC3, showing no inhibition of HDAC4/5/6/7/8/9. It exhibits an IC <sub>50</sub> of 304 nM for HDAC2 in primary hematopoietic progenitors [1].

## Solubility Information

Solubility	DMSO: 83.3 mg/mL (193.93 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 (4.66 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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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.3281 mL	11.6404 mL	23.2807 mL
5 mM	0.4656 mL	2.3281 mL	4.6561 mL
10 mM	0.2328 mL	1.164 mL	2.3281 mL
50 mM	0.0466 mL	0.2328 mL	0.4656 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

Shearstone JR, et al. Chemical Inhibition of Histone Deacetylases 1 and 2 Induces Fetal Hemoglobin through Activation of GATA2. PLoS One. 2016 Apr 13;11(4):e0153767.

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