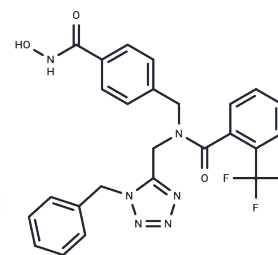


NR-160

## Chemical Properties

CAS No. : 2484895-50-1  
 Formula: C<sub>25</sub>H<sub>21</sub>F<sub>3</sub>N<sub>6</sub>O<sub>3</sub>  
 Molecular Weight: 510.47  
 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	NR-160 is a selective HDAC6 inhibitor (IC <sub>50</sub> =30 nM) with low cytotoxicity against leukemia cell lines.
Targets(IC50)	HDAC
In vitro	<p>Treatment of cells with NR-160 (Compound 6I) at concentrations of 2.5 μmol/L and 5 μmol/L for 24 hours induced acetylation modification of α-tubulin (acetylated α-tubulin) [1].</p> <p>When applied at concentrations ranging from 1 to 50 μmol/L for 24 hours, this compound exhibited weak cytotoxicity against leukemia cell lines, with all half-maximal inhibitory concentrations (IC<sub>50</sub>) above 20 μmol/L [1].</p> <p>In addition, treatment of HL-60 cells with 2.5 μmol/L and 5 μmol/L NR-160 for 24 hours significantly enhanced the cytotoxic induction effects of Bortezomib, Epirubicin and Daunorubicin on these cells [1].</p> <p>Cell viability assays demonstrated that NR-160 exerted an inhibitory effect on leukemia cell lines [1], with IC<sub>50</sub> values of 49.4 μM, 51.8 μM, 42.4 μM, 32.1 μM, 42.9 μM, 22.5 μM and 41.6 μM against TALL-1, HSB-2, MOLT-4, Jurkat, HL-60, SUP-B15 and K562 cells, respectively.</p>

## Solubility Information

Solubility	<p>Ethanol: 0.5 mg/mL (0.98 mM), Sonication is recommended.</p> <p>DMSO: 10 mg/mL (19.59 mM), Sonication is recommended.</p> <p>DMF: 15 mg/mL (29.38 mM), Sonication is recommended.</p> <p>(&lt; 1 mg/ml refers to the product slightly soluble or insoluble)</p>
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.959 mL	9.7949 mL	19.5898 mL
5 mM	0.3918 mL	1.959 mL	3.918 mL
10 mM	0.1959 mL	0.9795 mL	1.959 mL
50 mM	0.0392 mL	0.1959 mL	0.3918 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

ReBing N, et al. Multicomponent Synthesis, Binding Mode, and Structure-Activity Relationship of Selective Histone Deacetylase 6 (HDAC6) Inhibitors with Bifurcated Capping Groups. *J Med Chem.* 2020 Sep 24;63(18):10339-10351.  
Najib N N, et al. Correlation between the acoustic and dynamic mechanical properties of natural rubber foam: Effect of foaming temperature[J]. *Materials & Design*, 2011, 32(2): 505-511.

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