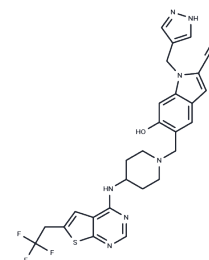


MI-538

## Chemical Properties

CAS No. : 1857417-10-7  
 Formula: C<sub>27</sub>H<sub>25</sub>F<sub>3</sub>N<sub>8</sub>O<sub>5</sub>  
 Molecular Weight: 566.6  
 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	MI-538 is an interaction between menin and MLL fusion proteins inhibitor(IC <sub>50</sub> of 21 nM).
Targets(IC <sub>50</sub> )	Epigenetic Reader Domain,Histone Methyltransferase
In vitro	Treatment with MI-538 results in strong down regulation of expression of Hoxa9 and Meis1 genes. About 100 nM 27 was sufficient to reduce by ~50% Hoxa9 expression in MLL-AF9 cells, and even more pronounced effect was seen on Meis1 expression.
In vivo	Treatment with MI-538 leads to an approximately 80% reduction in MV4;11 tumor volume, with minimal toxicity, evidenced by less than a 10% decrease in body weight.

## Solubility Information

Solubility	DMSO: 95 mg/mL (167.67 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: 10 mg/mL (17.65 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	1.7649 mL	8.8246 mL	17.6491 mL
5 mM	0.353 mL	1.7649 mL	3.5298 mL
10 mM	0.1765 mL	0.8825 mL	1.7649 mL
50 mM	0.0353 mL	0.1765 mL	0.353 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

Borkin D, et al. Property Focused Structure-Based Optimization of Small Molecule Inhibitors of the Protein-Protein Interaction between Menin and Mixed Lineage Leukemia (MLL). J Med Chem. 2016 Feb 11;59(3):892-913.

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