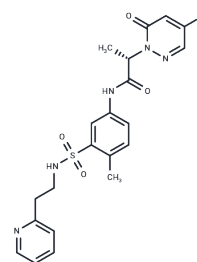


BRD0639

## Chemical Properties

CAS No. : 2760881-74-9  
 Formula: C<sub>21</sub>H<sub>22</sub>ClN<sub>5</sub>O<sub>4</sub>S  
 Molecular Weight: 475.95  
 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	BRD0639 is a pioneering inhibitor targeting the interaction between PRMT5 and its substrate adaptor. As a competitive inhibitor of the PRMT5 binding motif (PBM), BRD0639 facilitates the investigation of activities dependent on PBM-associated PRMT5 functions [1].
Targets(IC <sub>50</sub> )	Histone Methyltransferase
In vitro	BRD0639, a pioneering PBM-competitive small molecule, facilitates the research of PBM-dependent PRMT5 activities and aids in developing specific PRMT5 inhibitors. It effectively binds to the cellular target, efficiently inhibiting the interaction between full-length PRMT5 and RIOK1 proteins with IC <sub>50</sub> values of 7.5 μM and 16 μM in permeabilized and living cells, respectively. Moreover, BRD0639 decreases SDMA levels in proteins impacted by genetic alterations of the PRMT5 binding motif (PBM) site [1].

## Solubility Information

Solubility	DMSO: 60 mg/mL (126.06 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 (4.2 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	2.1011 mL	10.5053 mL	21.0106 mL
5 mM	0.4202 mL	2.1011 mL	4.2021 mL
10 mM	0.2101 mL	1.0505 mL	2.1011 mL
50 mM	0.042 mL	0.2101 mL	0.4202 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

McKinney DC, et al. Discovery of a First-in-Class Inhibitor of the PRMT5-Substrate Adaptor Interaction. J Med Chem. 2021 Aug 12;64(15):11148-11168.

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