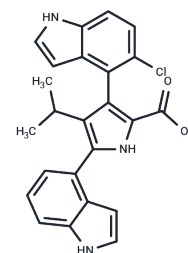


RB-3

## Chemical Properties

CAS No. : 2396639-11-3  
 Formula: C<sub>24</sub>H<sub>20</sub>ClN<sub>3</sub>O<sub>2</sub>  
 Molecular Weight: 417.89  
 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	RB-3, a PRC1 inhibitor, binds to RING1B-BMI1f with a K <sub>d</sub> of 2.8 μM.
Targets(IC <sub>50</sub> )	Others,E1/E2/E3 Enzyme
In vitro	RB-3 effectively reduces the overall ubiquitination of H2A, promoting differentiation in both leukemia cell lines and primary acute myeloid leukemia (AML) samples, with an inhibition concentration (IC <sub>50</sub> ) of 1.6 μM. Additionally, it disrupts the function of PRC1 by inhibiting its interaction with nucleosomes and attenuates colony formation in a mixed lineage leukemia (MLL)-eleven nineteen leukemia (ENL) model. Furthermore, through Western Blot Analysis on TEX cells at concentrations of 6, 12, 25 μM over 8 days, RB-3 was observed to incrementally elevate C/EBPα-p42 protein levels, indicating its potent biochemical activities relevant to leukemia research.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.393 mL	11.9649 mL	23.9297 mL
5 mM	0.4786 mL	2.393 mL	4.7859 mL
10 mM	0.2393 mL	1.1965 mL	2.393 mL
50 mM	0.0479 mL	0.2393 mL	0.4786 mL

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

Shirish Shukla, et al. Small-molecule inhibitors targeting Polycomb repressive complex 1 RING domain. Nat Chem Biol. 2021 Jul;17(7):784-793.

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

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