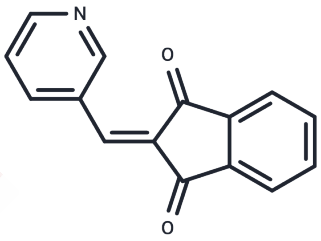
Data Sheet (Cat.No.T3110)

PRT4165

Chemical Properties



CAS No. : 31083-55-3

Formula: C15H9NO2

Molecular Weight: 235.24

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	PRT4165 (NSC600157) is a potent PRC1-mediated H2A ubiquitylation inhibitor.
Targets(IC50)	BMI-1,E1/E2/E3 Enzyme
In vitro	Inhibit the?in vitro?E3 ubiquitin ligase activity of RNF2 and a Bmi1/RNF2 complex and H2A/H2AX ubiquitination
In vivo	Blocks polycomb repressor complex (PRC) 1-mediated histone H2A ubiquitination?in vitro?and?in vivo.

Solubility Information

Solubility	DMSO: 25 mg/mL (106.27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 2.5 mg/mL (10.63 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2.5 mg/mL (10.63 mM),Solution. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.251 mL	21.2549 mL	42.5098 mL
5 mM	0.8502 mL	4.251 mL	8.502 mL
10 mM	0.4251 mL	2.1255 mL	4.251 mL
50 mM	0.085 mL	0.4251 mL	0.8502 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

Ismail, et al. J Biol Chem. 2013 Sep 13;288(37):26944-54.
Kuang J, Li P, Zhai Z, et al.Exclusion of HDAC1/2 complexes by oncogenic nuclear condensates.Molecular Cancer. 2024, 23(1): 85.
Li P, Zhai Z, Fan Y, et al.Condensate remodeling reorganizes innate SS18 in synovial sarcomagenesis. Oncogenesis.2024, 13(1): 38.
Alchanati, et al. PLoS One. 2009 Dec 1;4(12):e8104.