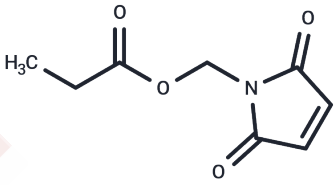
Data Sheet (Cat.No.T22980)

TargetMol

MIRA-1

Chemical Properties



CAS No. : 72835-26-8

Formula: C8H9NO4

Molecular Weight: 183.16

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	MIRA-1 (WRN Helicase Inhibitor) is a restorer of wild-type p53 conformation/cellular function and selectively inhibits Werner syndrome WRN helicase activity with an IC50 of 20 μM.
Targets(IC50)	Apoptosis,DNA/RNA Synthesis,p53,MDM-2/p53
In vitro	MIRA-1 induces p53 transcriptional transactivation of p21, MDM2, and PUMA, and promotes tumor cell death by apoptosis in a mutant p53-dependent manner in vitro with an IC50 of 10μM[1].

Solubility Information

Solubility	DMSO: 20 mg/mL (109.19 mM),Sonication is recommended. Ethanol: 20 mg/mL (109.19 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 (10.92 mM),Sonication is recommended. *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	5.4597 mL	27.2985 mL	54.5971 mL
5 mM	1.0919 mL	5.4597 mL	10.9194 mL
10 mM	0.546 mL	2.7299 mL	5.4597 mL
50 mM	0.1092 mL	0.546 mL	1.0919 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

Moles R, Bai XT, Chaib-Mezrag H, Nicot C. WRN-targeted therapy using inhibitors NSC 19630 and NSC 617145 induce apoptosis in HTLV-1-transformed adult T-cell leukemia cells. J Hematol Oncol. 2016 Nov 9;9(1):121.
Bou-Hanna C, Jarry A, Lode L, Schmitz I, Schulze-Osthoff K, Kury S, Bezieau S, Mosnier JF, Laboisse CL. Acute cytotoxicity of MIRA-1/NSC19630, a mutant p53-reactivating small molecule, against human normal and cancer cells via a caspase-9-dependent apoptosis. Cancer Lett. 2015 Apr 10;359(2):211-7.