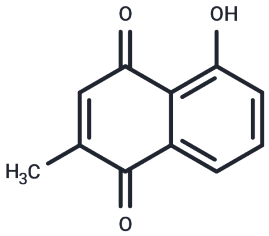
Data Sheet (Cat.No.T2841)

TargetMol

Plumbagin

Chemical Properties



CAS No. : 481-42-5

Formula: C11H8O3

Molecular Weight: 188.18

Storage: Store at low temperature,Keep away from direct sunlight,Keep away from moisture
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	Plumbagin (Plumbaein) is a yellow dye, formally derived from naphthoquinone. It is named after the plant genus Plumbago, from which it was originally isolated. It is also commonly found in the carnivorous plant genera Drosera and Nepenthes. It is also a component of the black walnut drupe.
Targets(IC50)	ROS

Solubility Information

Solubility	DMSO: 250.00 mg/mL (1328.52 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: 1.00 mg/mL (5.31 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	5.3141 mL	26.5703 mL	53.1406 mL
5 mM	1.0628 mL	5.3141 mL	10.6281 mL
10 mM	0.5314 mL	2.657 mL	5.3141 mL
50 mM	0.1063 mL	0.5314 mL	1.0628 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

Sumsakul W,et al. Asian Pac J Trop Med. 2015 Nov;8(11):914-918.
Xiong J, Wang L, Feng Z, et al.Halofantrine Hydrochloride Acts as an Antioxidant Ability Inhibitor That Enhances Oxidative Stress Damage to Candida albicans.Antioxidants.2024, 13(2): 223.