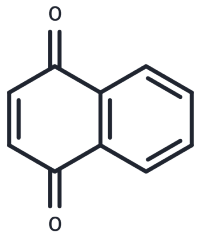
Data Sheet (Cat.No.T7048)

TargetMol

1,4-Naphthoquinone

Chemical Properties



CAS No. : 130-15-4

Formula: C10H6O2

Molecular Weight: 158.15

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	1,4-Naphthoquinone (P-Naphthoquinone) was used as a potential inhibitor of monoamine oxidase and DNA topoisomerase activities[2]. It was also used to inhibit the acetyltransferase activity[1].
Targets(IC50)	MAO,NF-κB,Antibacterial,DNA/RNA Synthesis,Monoamine Oxidase,TNF,Topoisomerase

Solubility Information

Solubility	DMSO: 71.43 mg/mL (451.66 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 7.14 mg/mL (45.15 mM),Solution. 10% DMSO+90% Saline: < 7.14 mg/mL (45.15 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	6.3231 mL	31.6156 mL	63.2311 mL
5 mM	1.2646 mL	6.3231 mL	12.6462 mL
10 mM	0.6323 mL	3.1616 mL	6.3231 mL
50 mM	0.1265 mL	0.6323 mL	1.2646 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

Vasudevarao M D, et al. Naphthoquinone-mediated inhibition of lysine acetyltransferase KAT3B/p300, basis for non-toxic inhibitor synthesis[J]. Journal of Biological Chemistry, 2014, 289(11):7702.
Zhang H, Cai J, Li C, et al.Wogonin inhibits latent HIV-1 reactivation by downregulating histone crotonylation. Phytomedicine.2023: 154855.