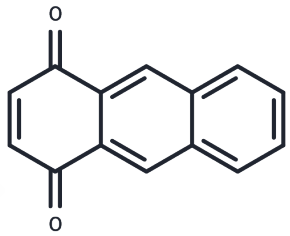
Data Sheet (Cat.No.TN2496)

TargetMol

1,4-Anthraquinone

Chemical Properties



CAS No. : 635-12-1

Formula: C14H8O2

Molecular Weight: 208.21

Storage: 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	1,4-Anthraquinone is an anticancer drug that blocks nucleoside transport, inhibits macromolecule synthesis, induces DNA fragmentation, and decreases the growth and viability of L1210 leukemic cells in the same nanomolar range as daunorubicin in vitro. 1,4-Anthraquinone is proposed as a novel pre-column reagent for high performance liquid chromatography (HPLC) determination of N-acetylcysteine (NAC) and captopril (CAP) in pharmaceutical formulations.
Targets(IC50)	Others,DNA/RNA Synthesis
In vitro	1,4-anthraquinone (AQ)?was the most active and selective molecule on the tested tumor cells

Solubility Information

Solubility	DMSO: 23.18 mg/mL (111.33 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 2.32 mg/mL (11.14 mM),Suspension. *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	4.8028 mL	24.0142 mL	48.0284 mL
5 mM	0.9606 mL	4.8028 mL	9.6057 mL
10 mM	0.4803 mL	2.4014 mL	4.8028 mL
50 mM	0.0961 mL	0.4803 mL	0.9606 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

Roa-Linares V , Miranda-Brand Y , V Tangarife-Castaño, et al. Anti-Herpetic, Anti-Dengue and Antineoplastic Activities of Simple and Heterocycle-Fused Derivatives of Terpenyl-1,4-Naphthoquinone and 1,4-Anthraquinone[J]. Molecules, 2019, 24(7).