Data Sheet (Cat.No.T78158)

TargetMol

MitoCur-1

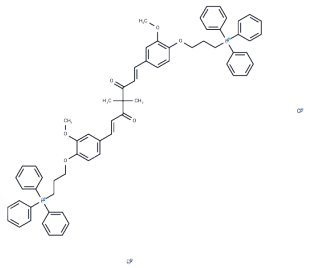
Chemical Properties

CAS No. :

Formula: C65H64Cl2O6P2

Molecular Weight: 1074.05

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	MitoCur-1, a curcumin analogue, inhibits the mitochondrial antioxidative enzyme thioredoxin reductase 2 (TrxR2) and possesses electrophilic characteristics with mitochondrial-targeting capabilities. This compound specifically induces reactive oxygen species (ROS) generation, demonstrating antitumor efficacy [1].
Targets(IC50)	Others
In vitro	MitoCur-1 exhibits selective cytotoxicity to HepG2 and L02 cells, with IC50 values of 1.4 μM and 9.1 μM, respectively [1]. At a concentration of 10 μM for 12 hours, MitoCur-1 induces ROS production and selectively depletes GSH in HepG2 cells [1]. Furthermore, MitoCur-1 (10 μM; 24 h) arrests the cell cycle at the G0/G1 phase and inhibits the expression of cell cycle proteins in HepG2 cells [1].
In vivo	MitoCur-1, administered intraperitoneally at doses of 5 mg/kg and 15 mg/kg on an every-other-day schedule for a total of four weeks, suppressed tumor growth in a murine model without affecting body weight [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9311 mL	4.6553 mL	9.3106 mL
5 mM	0.1862 mL	0.9311 mL	1.8621 mL
10 mM	0.0931 mL	0.4655 mL	0.9311 mL
50 mM	0.0186 mL	0.0931 mL	0.1862 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481