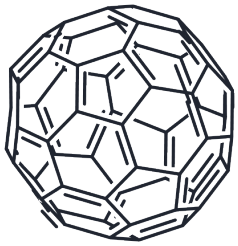
Data Sheet (Cat.No.T41141)

TargetMol

Fullerene-C60

Chemical Properties



CAS No. : 99685-96-8

Formula: C60

Molecular Weight: 720.64

Storage: Keep away from direct sunlight,Store under nitrogen
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	Fullerene-C60 is a potent free radical scavenger with a wide range of bioactivities that can attenuate liver injury and hepatotoxicity, and improve intestinal flora structure and lipid homeostasis.
Targets(IC50)	Free radical scavengers
In vitro	**Methods**: To estimate the accumulation of Fullerene-C60 in leukemic cells and to investigate its phototoxic effects on parental and cisplatin-treated leukemic cells. A stable homogeneous hydrocolloid solution of pristine C60 with an average nanoparticle diameter of 50 nm was used in the experiments. Fluorescently labeled C60 was synthesized by covalently coupling C60 with rhodamine B isothiocyanate. **Results**: Confocal microscopy **Results** showed that leukemic Jurkat cells could efficiently take up Fullerene-C60 from the culture medium. Light-emitting diode light (100 mW cm-2, λ = 420–700 nm) was used to excite the accumulated C60. When leukemic Jurkat cells were exposed to a combination of C60 and visible light treatment, a time-dependent decrease in viability was detected. [1]

Solubility Information

Solubility	DMSO: < 1 mg/mL, insoluble H2O: < 1 mg/mL, insoluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3877 mL	6.9383 mL	13.8766 mL
5 mM	0.2775 mL	1.3877 mL	2.7753 mL
10 mM	0.1388 mL	0.6938 mL	1.3877 mL
50 mM	0.0278 mL	0.1388 mL	0.2775 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

D Franskevych,et al. Fullerene C 60 Penetration into Leukemic Cells and Its Photoinduced Cytotoxic Effects. Nanoscale Res Lett.2017 Dec;12(1):40.