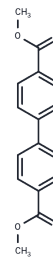


Dimethyl biphenyl-4,4'-dicarboxylate

Chemical Properties

CAS No. :	792-74-5
Formula:	C ₁₆ H ₁₄ O ₄
Molecular Weight:	270.28
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	Dimethyl biphenyl-4,4'-dicarboxylate (Biphenyl dimethyl dicarboxylate) is a planar biphenyldicarboxylic acid ester utilized as a hepatoprotectant for chronic hepatitis treatment.
Targets(IC50)	Others
In vitro	Dimethyl biphenyl-4,4'-dicarboxylate(DDB) (200 ug/10(6) cells) efficiently protected the hepatocytes against carbon tetrachloride (10 mM) and D-galactosamine (1 mM) induced damages. Membrane lipid peroxidation (malondialdehyde, MDA) formation and Glutamic Pyruvic Transaminase (GPT) released from the hepatocytes were markedly decreased. The damage of the cell surfaces of the hepatocytes were also reduced as seen under a scanning electron microscope (SEM)[1].
In vivo	Pretreatment with DDB (300 mg/kg) orally could ameliorate the reduction of liver glycogen and blood glucose caused by injection of D-gal (800 mg/kg i. p) in mice. When normal rats received 300 mg/kg of DDB once daily for 10 days, free ribosomal protein and RNA in the liver increased significantly[1].

Solubility Information

Solubility	H ₂ O: 2.5 mM, Sonication is recommended. DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6999 mL	18.4993 mL	36.9987 mL
5 mM	0.740 mL	3.6999 mL	7.3997 mL
10 mM	0.370 mL	1.8499 mL	3.6999 mL
50 mM	0.074 mL	0.370 mL	0.740 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

Fu T , Liu G . Protective effects of biphenyl dimethyl dicarboxylate on damage in isolated rat hepatocytes induced by carbon tetrachloride and D-galactosamine[J]. Zhonghua Yi Xue Za Zhi, 1990, 70(4):201-4, 16.

Joo S S , Won T J , Kim M J , et al. Interferon signal transduction of biphenyl dimethyl dicarboxylate/amantadine and anti-HBV activity in HepG2 2.2.15[J]. Archives of Pharmacal Research (Seoul), 2006, 29(5):405-411.

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