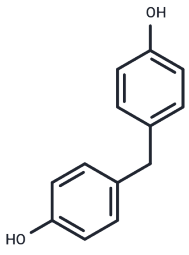
Data Sheet (Cat.No.TMA2386)

TargetMol

4,4'-Methylenediphenol

Chemical Properties



CAS No. : 620-92-8

Formula: C13H12O2

Molecular Weight: 200.23

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	4,4'-Methylenediphenol is a high purity product from Gastrodia rhizome with antioxidant activities.
Targets(IC50)	Apoptosis,Others,Akt,GSK-3,ROS
In vitro	Gastrodia rhizome, a dried and steamed tuber of Gastrodia elata Blume (Orchidaceae), has been traditionally used in Korea, China and Japan for the treatment of neurological and nervous disorders such as headaches, dizziness, vertigo and convulsive illnesses. The ethyl acetate and water extracts of G. elata stimulated plasmin activity[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (274.68 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (9.99 mM),Sonication is recommended. *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	4.9943 mL	24.9713 mL	49.9426 mL
5 mM	0.9989 mL	4.9943 mL	9.9885 mL
10 mM	0.4994 mL	2.4971 mL	4.9943 mL
50 mM	0.0999 mL	0.4994 mL	0.9989 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

Jeon JS, et al. Preparative purification of plasmin activity stimulating phenolic derivatives from Gastrodia elata using centrifugal partition chromatography. Biomed Chromatogr. 2016 Jun;30(6):976-82.
L Yi-Ming, et al. New Phenolic Derivatives from Galeola faberi. Planta Med. 1993 Aug;59(4):363-5.