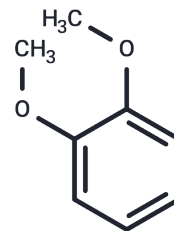


1,2-Dimethoxybenzene

Chemical Properties

CAS No. :	91-16-7
Formula:	C ₈ H ₁₀ O ₂
Molecular Weight:	138.16
Storage:	Pure form: -20°C for 3 years In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	1,2-Dimethoxybenzene, a natural product secreted by <i>Silene latifolia</i> , is an effective pollinator for the nocturnal moth <i>Hadena bicruris</i> .
Targets(IC50)	Apoptosis,Others,NF-κB,Antibiotic,Cytochromes P450

Solubility Information

Solubility	DMSO: 45 mg/mL (325.71 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 (14.48 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.238 mL	36.1899 mL	72.3798 mL
5 mM	1.4476 mL	7.238 mL	14.476 mL
10 mM	0.7238 mL	3.619 mL	7.238 mL
50 mM	0.1448 mL	0.7238 mL	1.4476 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

Mvula E, et al. Ozonolysis of lignin models in aqueous solution: anisole, 1,2-dimethoxybenzene, 1,4-dimethoxybenzene, and 1,3,5-trimethoxybenzene. *Environ Sci Technol.* 2009;43(16):6275-6282.

Yi JT, et al. Rotationally resolved electronic spectra of 1,2-dimethoxybenzene and the 1,2-dimethoxybenzene-water complex. *J Phys Chem A.* 2005;109(42):9456-9464.

Inokuchi Y, et al. UV and IR spectroscopy of cold 1,2-dimethoxybenzene complexes with alkali metal ions. *Phys Chem Chem Phys.* 2012;14(13):4457-4462.

Moriya M, et al. Structural design of ionic conduction paths in molecular crystals for selective and enhanced lithium ion conduction. *Chemistry.* 2013;19(40):13554-13560.

Gupta AK, et al. Identification of white campion (*Silene latifolia*) guaiacol O-methyltransferase involved in the biosynthesis of veratrole, a key volatile for pollinator attraction. *BMC Plant Biol.* 2012;12:158.

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