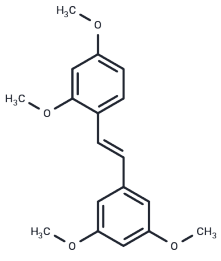
Data Sheet (Cat.No.T3585)

TMS

Chemical Properties



CAS No. : 24144-92-1

Formula: C18H20O4

Molecular Weight: 300.35

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	TMS (2,3',4,5'-Tetramethoxystilbene) is a very selective and potent competitive inhibitor of P450 1B1 (CYP1A1).
Targets(IC50)	Cytochromes P450
In vitro	Twenty-four hours after incubation with the 10 μM DOX in the presence and absence of 0.5 μM TMS, approximately 1.5 × 106 cells per six-well culture plate were collected in 100 μl lysis buffer (50 mM HEPES, 0.5 M sodium chloride, 1.5 mM magnesium chloride, 1 mM EDTA, 10% glycerol (v/v), 1% Triton X-100, and 5 μl/ml of protease inhibitor cocktail).
In vivo	Mice were administered 300 μg/kg of selective inhibitor of P450 1B1, TMS or its vehicle (dimethyl sulfoxide), i.p. every third day for the duration of the experimental period

Solubility Information

Solubility	DMSO: 70 mg/mL (233.06 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 (6.66 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	3.3294 mL	16.6472 mL	33.2945 mL
5 mM	0.6659 mL	3.3294 mL	6.6589 mL
10 mM	0.3329 mL	1.6647 mL	3.3294 mL
50 mM	0.0666 mL	0.3329 mL	0.6659 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

Einem Lindeman T,et al. The resveratrol analogue, 2,3',4,5'-tetramethoxystilbene, does not inhibit CYP gene expression, enzyme activity and benzo[a]pyrene-DNA adduct formation in MCF-7 cells exposed to benzo[a]pyrene. Mutagenesis. 2011 Sep;26(5):629-35.

Lin HS,et al. Quantification of oxyresveratrol analog trans-2,4,3',5'-tetramethoxystilbene in rat plasma by a rapid HPLC method: application in a pre-clinical pharmacokinetic study. Biomed Chromatogr. 2010 Dec;24(12):1373-8.