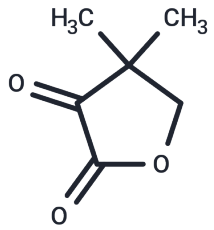
Data Sheet (Cat.No.T20466)

TargetMol

Keto-pantoyllactone

Chemical Properties



CAS No. : 13031-04-4

Formula: C6H8O3

Molecular Weight: 128.13

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	Keto-pantoyllactone (Dihydro-4,4-dimethyl-2,3-furandione) is assayed by the ketopantoyl lactone-dependent oxidation of nicotinamide adenine dinucleotide phosphate.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 4.8 mg/mL (37.46 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.8046 mL	39.0229 mL	78.0457 mL
5 mM	1.5609 mL	7.8046 mL	15.6091 mL
10 mM	0.7805 mL	3.9023 mL	7.8046 mL
50 mM	0.1561 mL	0.7805 mL	1.5609 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

King HL Jr, Dyar RE, Wilken DR. Ketopantoyl lactone and ketopantoic acid reductases. Characterization of the reactions and purification of two forms of ketopantoyl lactone reductase. J Biol Chem. 1974 Aug 10;249(15):4689-95.

Hata H, et al. Ketopantoyl lactone reductase is a conjugated polyketone reductase. FEMS Microbiol Lett. 1989 Mar;49(1):87-90.

Qin HM, et al. Structure of conjugated polyketone reductase from Candida parapsilosis IFO 0708 reveals conformational changes for substrate recognition upon NADPH binding. Appl Microbiol Biotechnol. 2014 Jan;98(1):243-9.

Lanzilotta RP, Bradley DG, McDonald KM. Microbial reduction of ketopantoyl lactone to pantoyl lactone. Appl Microbiol. 1974 Jan;27(1):130-4.