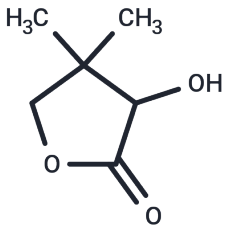
Data Sheet (Cat.No.Fr13863)

TargetMol

DL-Pantolactone

Chemical Properties



CAS No. : 79-50-5

Formula: C6H10O3

Molecular Weight: 130.14

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	DL-Pantolactone is a racemic form of pantolactone and serves as a biosynthetic precursor, an organic synthesis intermediate, and an additive in food and pharmaceuticals. DL-Pantolactone can be hydrolyzed by the lactolase of Fusarium oxysporum to form pantothenic acid. D-Pantolactone is the naturally active configuration and is an essential precursor for the biosynthesis of pantothenic acid in living organisms.
Targets(IC50)	Others

Solubility Information

Solubility	H2O: 80 mg/mL (614.72 mM),Sonication is recommended. DMSO: 80 mg/mL (614.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.684 mL	38.4202 mL	76.8403 mL
5 mM	1.5368 mL	7.684 mL	15.3681 mL
10 mM	0.7684 mL	3.842 mL	7.684 mL
50 mM	0.1537 mL	0.7684 mL	1.5368 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

Goodhue CT, et al. The bacterial degradation of pantothenic acid. 3. Enzymatic formation of aldopantoic acid. Biochemistry. 1966;5(2):403-408.

Shimizu S, et al. Optical resolution of pantolactone by a novel fungal enzyme, lactonohydrolase. Ann N Y Acad Sci. 1996;799:650-658.

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