Data Sheet (Cat.No.T41319)

TargetMol

D-Saccharic acid 1,4-lactone hydrate

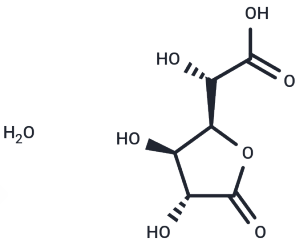
Chemical Properties

CAS No. : 61278-30-6

Formula: C17H20ClN3O

Molecular Weight: 317.81

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	D-Saccharic acid 1,4-lactone hydrate is a potent β-glucuronidase inhibitor (IC50=48.4 μM) that possesses anticarcinogenic, detoxifying, and antioxidant properties[1][2].
Targets(IC50)	Apoptosis,Others

Solubility Information

Solubility	DMSO: 245 mg/mL (770.9 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: 5 mg/mL (15.73 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	3.1465 mL	15.7327 mL	31.4653 mL
5 mM	0.6293 mL	3.1465 mL	6.2931 mL
10 mM	0.3147 mL	1.5733 mL	3.1465 mL
50 mM	0.0629 mL	0.3147 mL	0.6293 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

Taha M, et al. Synthesis, β-glucuronidase inhibition and molecular docking studies of hybrid bisindole-thiosemicarbazides analogs. Bioorg Chem. 2016;68:56-63.
Bhattacharya S, et al. Prophylactic role of D-Saccharic acid-1,4-lactone in tertiary butyl hydroperoxide induced cytotoxicity and cell death of murine hepatocytes via mitochondria-dependent pathways. J Biochem Mol Toxicol. 2011;25(6):341-354.

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