Data Sheet (Cat.No.T10942)

TargetMol

D-Threitol

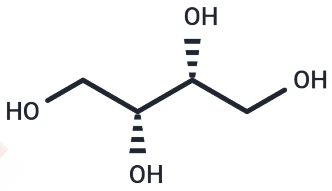
Chemical Properties

CAS No. : 2418-52-2

Formula: C4H10O4

Molecular Weight: 122.12

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-threitol is used as an antifreeze.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 55 mg/mL (450.38 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 (16.38 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	8.1887 mL	40.9433 mL	81.8867 mL
5 mM	1.6377 mL	8.1887 mL	16.3773 mL
10 mM	0.8189 mL	4.0943 mL	8.1887 mL
50 mM	0.1638 mL	0.8189 mL	1.6377 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

Walters KR Jr, et al. Cryoprotectant biosynthesis and the selective accumulation of threitol in the freeze-tolerant Alaskan beetle, Upis ceramboides. J Biol Chem. 2009 Jun 19;284(25):16822-31.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481