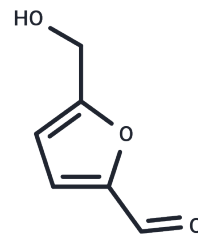


5-Hydroxymethylfurfural

Chemical Properties

CAS No. :	67-47-0
Formula:	C ₆ H ₆ O ₃
Molecular Weight:	126.11
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	5-Hydroxymethylfurfural (2-Formyl-5-hydroxymethylfuran) is found from various carbohydrates.
Targets(IC50)	Antifungal

Solubility Information

Solubility	DMSO: 262 mg/mL (2077.55 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 (39.65 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.9296 mL	39.6479 mL	79.2959 mL
5 mM	1.5859 mL	7.9296 mL	15.8592 mL
10 mM	0.793 mL	3.9648 mL	7.9296 mL
50 mM	0.1586 mL	0.793 mL	1.5859 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

Xu XB, et al. J Dairy Sci. 2014 Nov;97(11):6810-3.

Du J, Liu N, Ma L, et al. Antidepressant effect of the novel histone deacetylase-5 inhibitor T2943 in a chronic restraint stress mouse model. Biomedicine & Pharmacotherapy. 2024, 171: 116176.

Du J, Liu R, Ma L, et al. Novel histone deacetylase-5 inhibitor T2943 exerts an anti-depressive effect in mice by enhancing GRID1 expression. Scientific Reports. 2025, 15(1): 4522.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286

E_mail: info@targetmol.com

Address: 34 Washington Street, Wellesley Hills, MA 02481