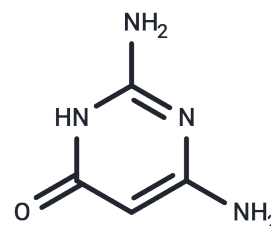


2,4-Diamino-6-hydroxypyrimidine

Chemical Properties

CAS No. :	56-06-4
Formula:	C ₄ H ₆ N ₄ O
Molecular Weight:	126.12
Storage:	Keep away from direct sunlight 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	2,4-Diamino-6-hydroxypyrimidine (DAHP) (DAHP) is a selective, specific inhibitor of GTP cyclohydrolase I, the rate limiting step for de novo pterin synthesis
Targets(IC50)	Reactive Oxygen Species, NO Synthase

Solubility Information

Solubility	DMSO: 125 mg/mL (991.12 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (79.29 mM), Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (7.93 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	7.929 mL	39.6448 mL	79.2896 mL
5 mM	1.5858 mL	7.929 mL	15.8579 mL
10 mM	0.7929 mL	3.9645 mL	7.929 mL
50 mM	0.1586 mL	0.7929 mL	1.5858 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

Sung Y J , Hotchkiss J H , Dieteri R R . 2,4-diamino-6-hydroxypyrimidine, an inhibitor of GTP cyclohydrolase I, suppresses nitric oxide production by chicken macrophages[J]. International Journal of Immunopharmacology, 1994, 16(2):101-108.

Shi Y, Xu N, Liu B, et al. Mifepristone protects acetaminophen induced liver injury through NRF2/GSH/GST mediated ferroptosis suppression. Free Radical Biology and Medicine. 2024

Werner-Felmayer G , Werner E R , Fuchs D , et al. Pteridine biosynthesis in human endothelial cells. Impact on nitric oxide-mediated formation of cyclic GMP[J]. Journal of Biological Chemistry, 1993, 268(3):1842-1846.

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