

6-Formylpterin

Chemical Properties

CAS No. : 712-30-1

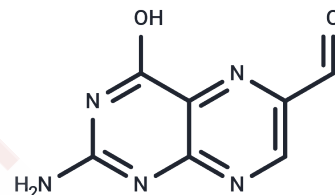
Formula: C₇H₅N₅O₂

Molecular Weight: 191.15

Storage: Keep away from direct sunlight, Store at low temperature

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	6-Formylpterin (Pterin-6-aldehyde) is an inhibitor of Xanthine Oxidase (K _i ~0.6 nM) with potent neuroprotective effects against transient IRI in gerbils. 6-Formylpterin induces intracellular ROS generation in HL-60 cells as well as apoptosis (6-Formylpterin inhibits the expression of iNOS, produces hydrogen peroxide intracellularly and restores the impaired bactericidal activity of human neutrophils.
Targets(IC50)	Apoptosis, NOS, Reactive Oxygen Species, Antibacterial, ROS, Xanthine Oxidase
In vitro	6-Formylpterin (0.5, 1, and 2 mM; 3h; HL-60 cells, Jurkat cells) Induced apoptosis in HL-60 cells, and Inhibited Fas-mediated apoptosis in Jurkat cells.[1] 6-Formylpterin (2 mM) produces ROS in HL-60 cells.[1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.2315 mL	26.1575 mL	52.3149 mL
5 mM	1.0463 mL	5.2315 mL	10.463 mL
10 mM	0.5231 mL	2.6157 mL	5.2315 mL
50 mM	0.1046 mL	0.5231 mL	1.0463 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

Arai T, et al. 6-formylpterin, a xanthine oxidase inhibitor, intracellularly generates reactive oxygen species involved in apoptosis and cell proliferation. Free Radic Biol Med. 2001 Feb 1;30(3):248-59.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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