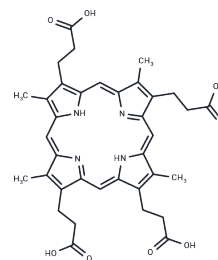


Coproporphyrin III

Chemical Properties

CAS No. :	14643-66-4
Formula:	C ₃₆ H ₃₈ N ₄ O ₈
Molecular Weight:	654.72
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	Coproporphyrin III is a derivative of porphyrin.
Targets(IC50)	Others,Endogenous Metabolite
In vitro	Coproporphyrin III methyl ester is repeatedly isolated in a considerable amount from both feces and urine. A great increase of coproporphyrin III excretion is unaccompanied by symptoms or signs of porphyria, metal, or chemical poisoning or liver disease [1]. In the presence of the porphyrin precursor, 5-aminolevulinate (ALA), the addition of insulin causes a striking increase in the accumulation of uroporphyrin I and coproporphyrin III. Antioxidants abolish the uroporphyrin I accumulation and increases coproporphyrin III [2].
In vivo	Urinary porphyrin and DMA profile can be used as an early warning biomarker for chronic MMA exposure before the onset of cancer. After 4 weeks the level of coproporphyrin III concentration significantly increases in all the treatment groups compared to the control [3].

Solubility Information

Solubility	DMSO: 83.3 mg/mL (127.23 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: 3.3 mg/mL (5.04 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	1.5274 mL	7.6369 mL	15.2737 mL
5 mM	0.3055 mL	1.5274 mL	3.0547 mL
10 mM	0.1527 mL	0.7637 mL	1.5274 mL
50 mM	0.0305 mL	0.1527 mL	0.3055 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

Watson CJ, et al. Studies of coproporphyrin. iii. idiopathic coproporphyrinuria; a hitherto unrecognized form characterized by lack of symptoms in spite of the excretion of large amounts of coproporphyrin. J Clin Invest. 1949 May;28(3):465-8.

Trask HW, et al. Effect of insulin and glucagon on accumulation of uroporphyrin and coproporphyrin from 5-aminolevulinate in hepatocyte cultures. Arch Biochem Biophys. 2005 Jul 1;439(1):1-11.

Krishnamohan M, et al. Urinary arsenic and porphyrin profile in C57BL/6J mice chronically exposed to monomethylarsonous acid (MMAIII) for two years. Toxicol Appl Pharmacol. 2007 Oct 1;224(1):89-97.

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