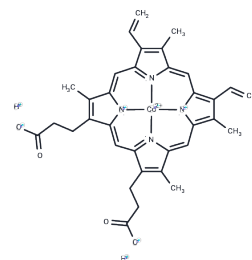


Cobalt protoporphyrin IX

Chemical Properties

CAS No. :	14325-03-2
Formula:	C ₃₄ H ₃₂ CoN ₄ O ₄
Molecular Weight:	619.58
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	Cobalt Protoporphyrin IX serves as a potent, specific inducer of heme oxygenase-1 (HO-1) and demonstrates broad-spectrum antiviral effects against Influenza A virus (IAV) [1].
Targets(IC50)	Reactive Oxygen Species, Influenza Virus, ROS
In vitro	Cobalt protoporphyrin IX demonstrated maximal non-toxic concentration (TC0) of 3.13 μ M in both MDCK and RAW264.7 cells after 72 hours [1]. At 2 μ M, with a treatment duration ranging from 0 to 24 hours, the compound increased HO-1 intracellular protein levels in a time-dependent manner in these cells [1]. With respect to influenza viruses Empty Cell A/FortMonmouth/1/1947, A/TianjinJinnan/15/2009, A/Wuhan/359/1995, A/FujianTongan/196/2009, and BY/FujianXinluo/54/2006, Cobalt protoporphyrin IX exhibited IC50 values of 0.40 ± 0.16 , 0.42 ± 0.15 , 0.46 ± 0.19 , 0.34 ± 0.05 , and 0.64 ± 0.30 μ M, respectively [1]. At concentrations ranging from 0.25-2 μ M for 18 or 24 hours, the compound inhibited IAV replication by enhancing the IFN response, an antiviral activity that was independent of the catalytic function of HO-1 [1]. Additionally, at 2 μ M for 0-6 hours, Cobalt protoporphyrin IX induction of HO-1 antiviral activity may be dependent on the phosphorylation and translocation of IRF3, thereby strengthening the antiviral IFN response [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.614 mL	8.070 mL	16.140 mL
5 mM	0.3228 mL	1.614 mL	3.228 mL
10 mM	0.1614 mL	0.807 mL	1.614 mL
50 mM	0.0323 mL	0.1614 mL	0.3228 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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