

FeTPPS

Chemical Properties

CAS No. :	90384-82-0
Formula:	C ₄₄ H ₂₈ ClFeN ₄ O ₁₂ S ₄
Molecular Weight:	1024.27
Storage:	Store at low temperature 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	FeTPPS, a decomposition catalyst for 5,10,15,20-tetrakis(4-sulfonatophenyl) porphyrin iron(III) chloride peroxyxynitrite, exhibits marked neuroprotective effects in experimental spinal cord injury models. It reduces cerebral tissue inflammation and damage, inhibits nitric oxide production and apoptosis, and may be employed in traumatic brain injury (TBI) research.
Targets(IC50)	Apoptosis,NO Synthase
In vitro	Methods: HepG2 human hepatocellular carcinoma cells were treated with FeTPPS (5, 10, 15, 20, 25µM for 12 hours), and cell viability was assessed via MTT assay. Results: FeTPPS protected cells from H ₂ O ₂ -induced oxidative damage.[2]

Solubility Information

Solubility	H ₂ O: 4 mg/mL (3.91 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9763 mL	4.8815 mL	9.7631 mL
5 mM	0.1953 mL	0.9763 mL	1.9526 mL
10 mM	0.0976 mL	0.4882 mL	0.9763 mL
50 mM	0.0195 mL	0.0976 mL	0.1953 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

Giuseppe Bruschetta, et al. FeTPPS Reduces Secondary Damage and Improves Neurobehavioral Functions after Traumatic Brain Injury. *Front Neurosci.* 2017 Feb 7;11:6.

Pengfei Zhang, et al. Study on the detoxification mechanisms to 5,10,15,20-tetrakis (4-sulfonatophenyl) porphyrinato iron(III) chloride (FeTPPS), an efficient pro-oxidant of heme water-soluble analogue. *J Inorg Biochem.* 2018 Dec;189:40-52.

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Li J, et al. Peroxynitrite is a key mediator of the cardioprotection afforded by ischemic postconditioning in vivo. *PLoS One.* 2013 Jul 10;8(7):e70331.

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