FeTPPS

Cat. No.: HY-131697

CAS No.: 90384-82-0

Molecular Formula: $C_{44}H_{28}ClFeN_4O_{12}S_4$

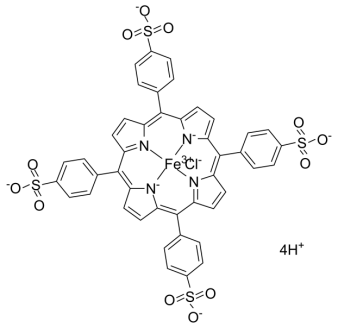
Molecular Weight: 1024.27

Target: NO Synthase; Apoptosis

Pathway: Immunology/Inflammation; Apoptosis

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H_2O : 10 mg/mL (9.76 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	0.9763 mL	4.8815 mL	9.7631 mL
	5 mM	0.1953 mL	0.9763 mL	1.9526 mL
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

FeTPPS, a 5,10,15,20-tetrakis (4-sulfonatophenyl) porphyrin iron III chloride peroxynitrite decomposition catalyst, possesses evident neuroprotective effects in a experimental model of spinal cord damage[1]. FeTPPS acts as a peroxynitrite scavenger and anti-nitrating agent in vivo. FeTPPS reduces nitric oxide (NO) production and apoptosis process [2].

In Vitro

FeTPPS acts as an effective pro-oxidant towards appreciable substrates in vitro in the presence of oxidant. FeTPPS protects cells against oxidative damage induced by H_2O_2, generated by Glucose (G)-glucose oxidase (GO) system[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[2]

Cell Line:	Human hepatocellular carcinoma (HepG2)
Concentration:	5, 10, 15, 20, 25 μM
Incubation Time:	Treated 12 h before being exposed to H_2O_2

Result:	Could protect cells against oxidative damage induced by H_2O_2.

REFERENCES

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

[2]. 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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