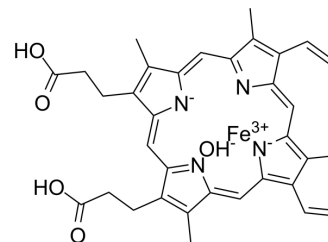


Hematin

Cat. No.:	HY-W040030		
CAS No.:	15489-90-4		
Molecular Formula:	C ₃₄ H ₃₃ FeN ₄ O ₅		
Molecular Weight:	633.49		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 1.43 mg/mL (2.26 mM; ultrasonic and warming and heat to 70°C)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.5786 mL	7.8928 mL	15.7856 mL
	5 mM	---	---	---
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

Hematin, an iron-containing porphyrin, inhibits the activity of clotting factors and also fibrin clot lysis through the mechanism of binding to and inactivation of hemostatic proteins^[1]. Hematin can be used for the research of acute porphyrias and cancer^{[1][2][3][4][5]}.

In Vitro

Hematin (0.01 mg/ml) inhibits the clotting of bovine fibrinogen (1.3 to 2.6 mg/ml) by bovine thrombin (0.12 U/ml) and inhibits the hydrolysis of a synthetic substrate by human thrombin^[2].
 Hematin (0.035 mg/ml) reduces VIII:C activity from 0.88 to 0.40 U/ml^[2].
 Hematin (0.05 mg/ml) inhibits the activation of VIII:C by thrombin (0.04 U/ml)^[2].
 Hematin (0.09 mg/ml) inhibits the hydrolysis of a synthetic substrate by plasmin^[2].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Hematin (i.v.; single injection) suppressed porphyrin production in SD rat (weighing 160-205 g)^[4].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [5]. Quadros HC, et al. The Role of the Iron Protoporphyrins Heme and Hematin in the Antimalarial Activity of Endoperoxide Drugs. *Pharmaceuticals (Basel).* 2022;15(1):60. Published 2022 Jan 4.
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Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA