

PRODUCT INFORMATION



Ferroprotoporphyrin

Item No. 34327

CAS Registry No.: 14875-96-8
Formal Name: (SP-4-2)-[7,12-diethenyl-3,8,13,17-tetramethyl-21H,23H-porphine-2,18-dipropanoato(4-)-κN21,κN22,κN23,κN24]-ferrate(2-), hydrogen (1:2)

Synonyms: Ferrous Protoporphyrin IX, Heme, Heme *b*, Heme Fe(II) Complex, Iron Protoporphyrin IX, NSC 267100, Protoporphyrin IX Iron Complex

MF: C₃₄H₃₀FeN₄O₄ • 2H

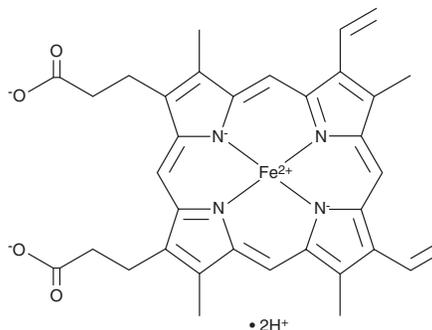
FW: 616.5

Purity: ≥90%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ferroprotoporphyrin is supplied as a solid. A stock solution may be made by dissolving the ferroprotoporphyrin in the solvent of choice, which should be purged with an inert gas. Ferroprotoporphyrin is soluble in the organic solvent dimethyl formamide at a concentration of approximately 1 mg/ml. Ferroprotoporphyrin is slightly soluble in DMSO.

Description

Ferroprotoporphyrin is an iron-containing cofactor.^{1,2} It is involved in several biological processes such as the transport or storage of oxygen by hemoglobin or myoglobin, respectively, electron transfer by cytochrome b5, and oxidation of xenobiotics or endogenous substrates by cytochrome P450s (CYPs).

References

1. Shimizu, T., Lengalova, A., Martínek, V., *et al.* Heme: Emergent roles of heme in signal transduction, functional regulation and as catalytic centres. *Chem. Soc. Rev.* **48(24)**, 5624-5657 (2019).
2. Schneider, S., Marles-Wright, J., Sharp, K.H., *et al.* Diversity and conservation of interactions for binding heme in b-type heme proteins. *Nat. Prod. Rep.* **24(3)**, 621-630 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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