

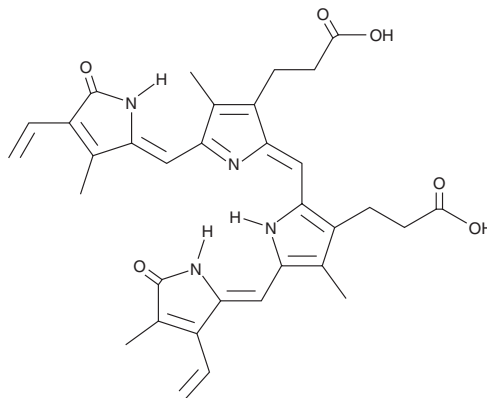
PRODUCT INFORMATION



Biliverdin (technical grade)

Item No. 36337

CAS Registry No.: 114-25-0
Formal Name: 3,18-diethenyl-1,19,22,24-tetrahydro-2,7,13,17-tetramethyl-1,19-dioxo-21H-bilene-8,12-dipropionic acid
Synonym: NSC 62793
MF: C₃₃H₃₄N₄O₆
FW: 582.7
Purity: ≥70%
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

Biliverdin (technical grade) is supplied as a solid. A stock solution may be made by dissolving the biliverdin (technical grade) in the solvent of choice, which should be purged with an inert gas. Biliverdin (technical grade) is slightly soluble in methanol and DMSO.

Description

Biliverdin is a porphyrin bile pigment and precursor in the biosynthesis of bilirubin (Item No. 17161).^{1,2} It is formed *via* oxidative catabolism of heme by heme oxygenase-1 (HO-1) and further reduced to bilirubin by biliverdin reductase. Biliverdin has antioxidant activity in oxygen radical absorbance capacity (ORAC) and Trolox equivalent absorbance capacity (TEAC) assays when used at concentrations greater than 0.5 μM.³

References

1. Liu, Y., Moënné-Loccoz, P., Loefer, T.M., *et al.* Heme oxygenase-1, intermediates in verdoheme formation and the requirement for reduction equivalents. *J. Biol. Chem.* **272(11)**, 6909-6917 (1997).
2. Maines, M.D. The heme oxygenase system: A regulator of second messenger gases. *Annu. Rev. Pharmacol. Toxicol.* **37**, 517-554 (1997).
3. Mölzer, C., Huber, H., Steyrer, A., *et al.* *In vitro* antioxidant capacity and antigenotoxic properties of protoporphyrin and structurally related tetrapyrroles. *Free Radic. Res.* **46(11)**, 1369-1377 (2012).

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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