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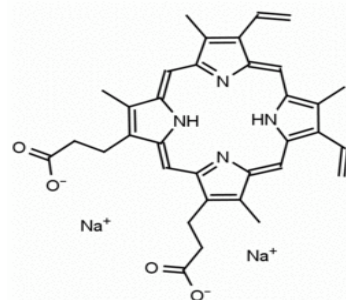
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Technical Data Sheet
Catalog Number: **P606-Na**

For research use only
Not intended or approved for
diagnostic or therapeutic use.

Product Name: Protoporphyrin IX disodium salt

Catalog Number: P606-Na



Sizes Available: 250 mg, 1 g, 5g, and larger sizes available

Molecular Formula: $C_{37}H_{44}N_6O_{10}S_2Na_2$

MW: 606.2

CAS Number: 50865-01-5

Storage: Store at room temperature, protect from light

Synonyms: Palepron; Protoporphyrin Disodium; Protoporphyrin IX Disodium Salt, PPIX

Field of Interest: Natural Products Synthesis, Heme Containing Proteins, Hemoglobin, Myoglobin, Cytochrome C pathology, Complexes, Chlorophyll Biosynthesis

Background: Protoporphyrin IX disodium salt is a porphyrin based natural product that is a starting material for the biosynthesis of heme and chlorophyll. ^{1,2} More recently protoporphyrin IX and its congeners have been found active as ligands that promote protein stability and crystallization and activity against telomerases and mammalian cells. ^{3,4}

References:

- 1) Winslow S. Caughey, James A. Ibers, Crystal and Molecular Structure of the Free Base Porphyrin, Protoporphyrin IX Dimethyl Ester, *J. Am. Chem. Soc.* **99**: 1977, 6639–6645.
- 2) A. R. Battersby; C. J. R. Fookes; G. W. J. Matcham; E. McDonald, Biosynthesis of the pigments of life: formation of the macrocycle, *Nature*. **285**: 1980, 17–21.
- 3) Vedadi, Masoud; Niesen, Frank H.; Allali-Hassani, Abdellah; Fedorov, Oleg Y.; Finerty, Patrick J., Jr.; Wasney, Gregory A.; Yeung, Ron; Arrowsmith, Cheryl; Ball, Linda J.; Berglund, Helena; et al, Chemical screening methods to identify ligands that promote protein stability, protein crystallization, and structure determination, *Proceedings of the National Academy of Sciences of the United States of America* (2006), 103(43), 15835-15840.
- 4) Shi, Dong-Fang; Wheelhouse, Richard T.; Sun, Daekyu; Hurley, Laurence H., Quadruplex-Interactive Agents as Telomerase Inhibitors: Synthesis of Porphyrins and Structure-Activity Relationship for the Inhibition of Telomerase, *Journal of Medicinal Chemistry* (2001), 44(26), 4509-4523.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. **Bilirubin** is manufactured, shipped according to standard practices, and intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

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