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Frontier Specialty Chemicals, Inc. **Technical Data Sheet**
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Catalog Number: **M566-9**

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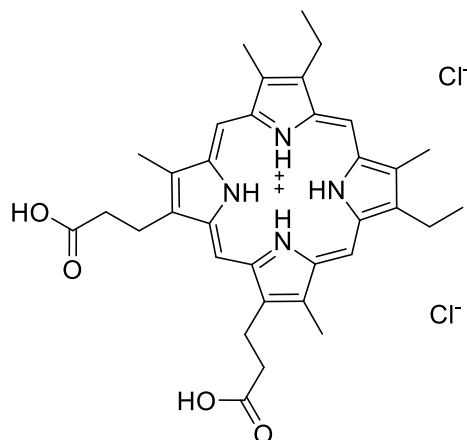
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For research use only

Not intended or approved for
diagnostic or therapeutic use.

Product Name: Mesoporphyrin IX dihydrochloride

Catalog Number: **M566-9**



Sizes Available: 10 mg, 25 mg, 50 mg, 100 mg, 250 mg and larger sizes available

Molecular weight: 639.6 g/mol

Molecular Formula: C₃₄H₃₈N₄O₄ 2HCl

CAS Number: 68938-72-7

Storage: Store at room temperature and protect from light.

Synonyms: Mesoporphyrin IX, Mesoporphyrin, MPIX, 493-90-3

Mesoporphyrin IX, dihydrochloride, 7,12-Diethyl-3,8,13,17-tetramethyl-21H,23H-porphine-2,18-dipropionic acid, 68938-72-7, 7,12-diethyl-3,8,13,17-tetramethyl-2,18-Porphinedipropionic acid, 21H,23H-Porphine-2,18-dipropionic acid, 7,12-diethyl-3,8,13,17-tetramethyl-, hydrochloride (1:2), 7,12-Diethyl-3,8,13,17-tetramethyl-21H,23H-porphine-2,18-dipropionic acid, mesoporphyrin, EINECS 207-782-4, 3,3'-(7,12-diethyl-3,8,13,17, tetramethylporphyrin-2,18-diyl)dipropionic acid, SCHEMBL314687, ChEMBL276179

Field of Interest: Natural Porphyrin, Catalyst, Radical Scavenger

Background: Mesoporphyrin IX dihydrochloride is a natural product and fine chemical that has photodynamic activities, while derivatives are potent photosensitizers used in medicine¹⁻⁴.

References:

- 1) Roy, Indrajit; Ohulchanskyy, Tymish Y.; Pudavar, Haridas E.; Bergey, Earl J.; Oseroff, Allan R.; Morgan, Janet; Dougherty, Thomas J.; Prasad, Paras N. Ceramic-base nanoparticles entrapping water-insoluble photosensitizing anticancer drugs: a novel drug-carrier system for photodynamic therapy, *Journal of the American Chemical Society* (2003), 125(26), 7860-7865. Language: English, Database: CAPLUS, DOI:10.1021/ja0343095
- 2) He, Chunbai; Duan, Xiaopin; Guo, Nining; Chan, Christina; Poon, Christopher; Weichselbaum, Ralph R.; Lin, Wenbin, Core-shell nanoscale coordination polymers combine chemotherapy and photodynamic therapy to potentiate checkpoint blockade cancer immunotherapy, *Nature Communications* (2016), 7, 12499. DOI:10.1038/ncomms12499
- 3) Bellnier, David A.; Greco, William R.; Loewen, Gregory M.; Nava, Hector; Oseroff, Allan R.; Pandey, Ravindra K.; Tsuchida, Takaaki; Dougherty, Thomas J., Population Pharmacokinetics of the Photodynamic Therapy Agent 2-[1-Hexyloxyethyl]-2-devinyl Pyropheophorbide-a in Cancer Patients, *Cancer Research* (2003), 63(8), 1806-1813
- 4) Snyder, John W.; Greco, William R.; Bellnier, David A.; Vaughan, Lurine; Henderson, Barbara W., Photodynamic Therapy: A Means to Enhanced Drug Delivery to Tumors, *Cancer Research* (2003), 63(23), 8126-8131.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. **Mesoporphyrin IX dihydrochloride** 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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