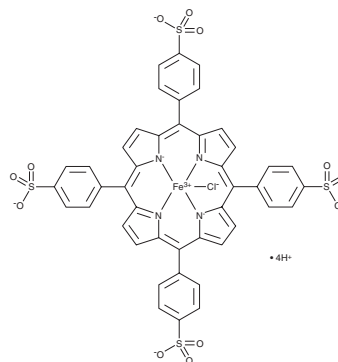


# PRODUCT INFORMATION

## FeTPPS

Item No. 17187

**CAS Registry No.:** 90384-82-0  
**Formal Name:** Fe(III)5,10,15,20-tetrakis  
(4-sulfonatophenyl)porphyrinato chloride  
**MF:** C<sub>44</sub>H<sub>24</sub>ClFeN<sub>4</sub>O<sub>12</sub>S<sub>4</sub> • 4H  
**FW:** 1,024.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 394 nm  
**Supplied as:** A crystalline 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

FeTPPS is supplied as a crystalline solid. A stock solution may be made by dissolving the FeTPPS in water. The solubility of FeTPPS in water is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Peroxynitrite (Item No. 81565) is a highly reactive nitrogen species formed from the reaction of nitric oxide (NO) and superoxide.<sup>1</sup> FeTPPS is a ferric porphyrin complex that causes the decomposition of peroxynitrite by catalytic isomerization to produce nitrate both *in vitro* and *in vivo*.<sup>2</sup> The conversion of this reactive nitrogen species to nitrate results in cytoprotection (EC<sub>50</sub> = 5 μM).<sup>2,3</sup> FeTPPS does not complex with NO and does not alter superoxide directly. It is commonly used to elucidate the roles of peroxynitrite in oxidative stress, cell damage, and intracellular signaling.<sup>4-6</sup>

### References

1. Chen, X., Chen, H., Deng, R., *et al.* Pros and cons of current approaches for detecting peroxynitrite and their applications. *Biomed. J.* **37(3)**, 120-126 (2014).
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3. Misko, T.P., Highkin, M.K., Veenhuizen, A.W., *et al.* Characterization of the cytoprotective action of peroxynitrite decomposition catalysts. *J. Biol. Chem.* **273(25)**, 15646-15653 (1998).
4. Ishrat, T., Kozak, A., Alhusban, A., *et al.* Role of matrix metalloproteinase activity in the neurovascular protective effects of angiotensin antagonism. *Stroke Res. Treat.* 560491 (2014).
5. Li, J., Loukili, N., Rosenblatt-Velin, N., *et al.* Peroxynitrite is a key mediator of the cardioprotection afforded by ischemic preconditioning *in vivo*. *PLoS One* **8(7)**, 1-8 (2013).
6. Kiss, A., Tratsiakovich, Y., Gonon, A.T., *et al.* The role of arginase and rho kinase in cardioprotection from remote ischemic preconditioning in non-diabetic and diabetic rat *in vivo*. *PLoS One* **9(8)**, e104731 (2014).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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