

Mn(III)TMPyP biochemical

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CATALOG #
AAA227092

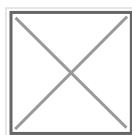
PRODUCT SYNONYMS

Mn(III)TMPyP; Mn(III)TMPyP biochemical

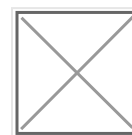
PRODUCT SPECIFICATIONS

Purity/Purification	98%
Solubility	0.1 M Tris-HCl buffer (1 mM EDTA, pH 9.0): 50 mg/mL PBS (pH 7.2): 4 mg/mL <1mg/ml refers to the product slightly soluble or insoluble
Preparation and Storage	Powder: -20 degree C for 3 years In solvent: -80 degree C for 2 years

IMAGES



Structure
9,10-Dihydroxystearic acid, CAS 120-87-6



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ADDITIONAL INFORMATION

Related Product Information for Mn(III)TMPyP biochemical	Mn(III)TMPyP is a manganese-porphyrin which acts as a superoxide dismutase (SOD) mimetic and peroxynitrite decomposition catalyst. SOD mimetics described to date are unstable and are capable of catalyzing undesired side-reactions in addition to the dismutation of the superoxide radical (O ₂ ⁻). Mn(III)TMPyP is an SOD mimetic with increased stability to pH and hydrogen peroxide. The rate constant for superoxide dismutation and peroxynitrite decomposition are 3.9 x 10 ⁷ M ⁻¹ s ⁻¹ and ~2 x 10 ⁶ M ⁻¹ s ⁻¹ , respectively. Mn(III)TMPyP protected and enhanced the growth of SOD E. coli with a doubling time of 60 minutes (as compared to 240 minutes of the control) at 25 uM.
References	1. Xiaoming Yu, et al. Effects of 9,10-dihydroxystearic acid on glucose metabolism in KKAY mice. Wei Sheng Yan Jiu. 2010 Jul;39(4):423-5.

NCBI AND UNIPROT INFORMATION

Molecular Weight	338.464
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.