

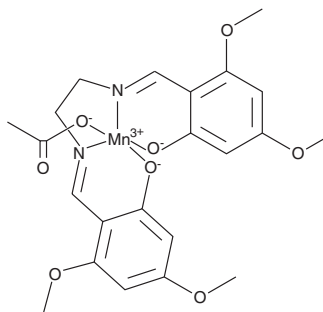
PRODUCT INFORMATION



EUK 118

Item No. 10271

CAS Registry No.: 186299-34-3
Formal Name: (acetato-kO)
[[2,2'-[1,2-ethanediylbis[(nitrilo-kN)
methylidyne]]bis[3,5-dimethoxyphenolato-
kO]](2-)-manganese
MF: C₂₂H₂₅MnN₂O₈
FW: 500.4
Purity: ≥95%
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

EUK 118 is supplied as a crystalline solid. A stock solution may be made by dissolving the EUK 118 in the solvent of choice, which should be purged with an inert gas. EUK 118 is soluble in organic solvents such as ethanol and DMSO. The solubility of EUK 118 in these solvents is approximately 1 and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of EUK 118 can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of EUK 118 in PBS, pH 7.2, is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

EUK 8 and EUK 134 (Item No. 10006329) are synthetic catalytic scavengers of reactive oxygen species with superoxide dismutase (SOD) and catalase mimetic activity.¹ EUK 118 is a structural analog of EUK 8 and EUK 134 with significantly reduced activity. EUK 118 exhibits a catalase activity of 35 μM O₂ formed/minute from 10 mM hydrogen peroxide, which is more than four times lower than that observed for EUK 8 under the same conditions.² Superoxide-mediated reduction of an electron acceptor (*i.e.*, SOD mimetic activity) was inhibited by EUK 118 and EUK 8 with IC₅₀ values of 2 and 0.7 μM, respectively. EUK 118 did not protect human dermal fibroblasts against hydrogen peroxide-induced cell death.²

References

1. Baker, K., Marcus, C.B., Huffman, K., *et al.* Synthetic combined superoxide dismutase/catalase mimetics are protective as a delayed treatment in a rat stroke model: A key role for reactive oxygen species in ischemic brain injury. *J. Pharmacol. Exp. Ther.* **284**(1), 215-221 (1998).
2. Doctrow, S.R., Huffman, K., Marcus, C.B., *et al.* Salen-manganese complexes as catalytic scavengers of hydrogen peroxide and cytoprotective agents: Structure-activity relationship studies. *J. Med. Chem.* **45**, 4549-4558 (2002).

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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