PRODUCT INFORMATION



EUK 124

Item No. 12500

CAS Registry No.: 186299-35-4

Formal Name: (SP-5-13)- chloro[[2,2'-[1,2-

> ethanediylbis[(nitrilo-kN)methylidyne]] bis[3,5-dimethoxyphenolato-kO]]

(2-)]-manganese

C₂₀H₂₂CIMnN₂O₄ MF: FW: 476.8

Purity:

λ_{max}: 223, 243, 303, 347 nm UV/Vis.:

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

EUK 124 is supplied as a crystalline solid. A stock solution may be made by dissolving the EUK 124 in the solvent of choice, which should be purged with an inert gas. EUK 124 is soluble in organic solvents such as ethanol and DMSO. The solubility of EUK 124 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 124 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of EUK 124 in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the agueous 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. EUK 124 is a structural analog of EUK 8 and EUK 134 with significantly reduced activity. EUK 124 and EUK 8 inhibit superoxide-mediated reduction of an electron acceptor (i.e., SOD mimetic activity), with IC_{50} values of 5 and 0.7 μ M, respectively.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(20), 4549-4558 (2002).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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