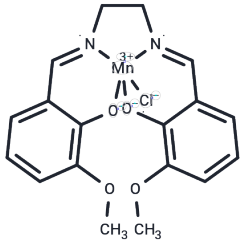
Data Sheet (Cat.No.T6495)

TargetMol

EUK-134

Chemical Properties



CAS No. : 81065-76-1

Formula: C18H18ClMnN2O4

Molecular Weight: 416.74

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	EUK-134, a synthetic superoxide dismutase (SOD)/catalase mimetic, exhibits potent antioxidant activities and inhibits the formation of β-amyloid and related amyloid fibrils.
Targets(IC50)	Beta Amyloid
In vitro	EUK 134 shows potent catalase and SOD activities, and protects human fibroblasts against cytotoxicity by glucose and glucose oxidase. [1] EUK 134 (20 μM) prevents Aβ-induced microglial proliferation in vitro. [2] In SK-N-MC cells, EUK134 protects neuronal cells against H(2)O(2) toxicity by attenuating oxidative stress through inhibition of MAPK pathway, and also results in decreased expression of pro-apoptotic genes p53 and Bax as well as enhanced expression of anti-apoptotic Bcl-2 gene. [3] EUK 134 significantly inhibits amyloid formation at two molar ratios of 1:1 and 5:1 (drugs to protein). [4]
In vivo	EUK 134 (2.5 mg/kg), in a middle cerebral artery occlusion model, significantly reduces brain infarct size, and apparently prevents further infarct growth. [1] EUK-134 prevents oxidative stress and attenuates rat brain damage induced by systemic administration of systemic kainic acid (KA). [5]

Solubility Information

Solubility	DMSO: 10 mg/mL (24 mM),Sonication is recommended. H2O: 11 mg/mL (26.4 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3996 mL	11.9979 mL	23.9958 mL
5 mM	0.4799 mL	2.3996 mL	4.7992 mL
10 mM	0.240 mL	1.1998 mL	2.3996 mL
50 mM	0.048 mL	0.240 mL	0.4799 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Baker K, et al. J Pharmacol Exp Ther. 1998, 284(1), 215-221.
Jekabsone A, et al. J Neuroinflammation. 2006, 3, 24.
Mohammadi M, et al. Basic Clin Pharmacol Toxicol. 2011, 108(6), 378-384.
Bahramikia S, et al. Eur J Pharmacol. 2013, 707(1-3), 17-25.
Rong Y, et al. Proc Natl Acad Sci U S A. 1999, 96(17), 19897-19902.