



Certificate of Analysis

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Product Name: Edaravone Catalog No.: 0786 Batch No.: 1

CAS Number: 89-25-8 EC Number: 201-891-0

IUPAC Name: 3-Methyl-1-phenyl-2-pyrazolin-5-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{10}H_{10}N_2O$ Batch Molecular Weight: 174.2

Physical Appearance: Light yellow solid
Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: R_f = 0.41 (Dichloromethane:Methanol:Ammonia soln. [10:1:0.1])

Melting Point:Between 129 - 130°CHPLC:Shows 99.9% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 68.95 5.79 16.08 Found 68.83 6.01 16.11

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Jan 29th 2019

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Description:

A radical scavenger and antioxidant which is able to protect against the effects of ischemia, probably by inhibiting the lipoxygenase system. Protects against MPTP-induced neurotoxicity. Inhibits autophagy.

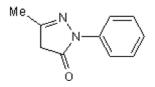
Physical and Chemical Properties:

Batch Molecular Formula: $C_{10}H_{10}N_2O$ Batch Molecular Weight: 174.2

Physical Appearance: Light yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Galluzzi *et al* (2017) Pharmacological modulation of autophagy: therapeutic potential and persisting obstacles. Nat.Rev.Drug.Discov. . PMID: 28529316 .

Kawasaki *et al* (2007) Edaravone (3methyl-1-phenyl-2-pyrazolin-5-one), a radical scavenger, prevents 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced neurotoxicity in the substantia nigra but not the striatum. J.Pharmacol.Exp.Ther. **322** 274. PMID: 17429058.

Kawai et al (1997) Effects of a novel free radical scavenger, MC-186, on ischemic brain damage in rat distal middle cerebral artery occlusion model. J.Pharmacol.Exp.Ther. 281 921. PMID: 9152402.

Watanabe *et al* (1994) Protective effects of MCI-186 on cerebral ischemia: possible involvement of free radical scavenging and antioxidant actions. J.Pharmacol.Exp.Ther. **268** 1597. PMID: 8138971.

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