Print Date: Sep 13th 2018

Certificate of Analysis

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Product Name: **M 30 dihydrochloride** **Catalog No.: 6067** **Batch No.: 1**

CAS Number: 64821-19-8

IUPAC Name: *N*-(8-Hydroxy-5-quinolylmethyl)-*N*-methyl-2-propynylamine dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_{14}N_2O.2HCl$

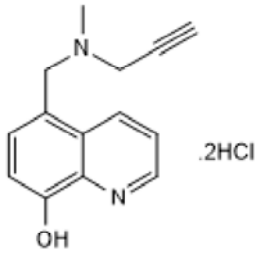
Batch Molecular Weight: 299.2

Physical Appearance: Yellow solid

Solubility: water to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.1% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	56.2	5.39	9.36
Found	55.82	5.44	9.19

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

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Product Information

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CAS Number: 64821-19-8

IUPAC Name: *N*-(8-Hydroxy-5-quinolylmethyl)-*N*-methyl-2-propynylamine dihydrochloride

Description:

Potent and non-selective monoamine oxidase (MAO) inhibitor (EC_{50} values are 37 and 57 nM for MAO-A and MAO-B, respectively). Displays brain selectivity. Also an iron chelator with antioxidant properties. Protects cells against 6-OHDA (Cat. No. 2547) induced apoptosis. Attenuates MPTP depletion of DA and increases striatal levels of monoamines in a Parkinson's disease mouse model

Physical and Chemical Properties:

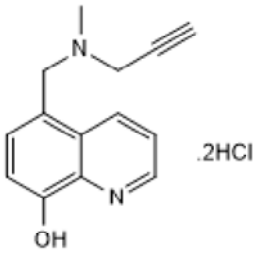
Batch Molecular Formula: $C_{14}H_{14}N_2O.2HCl$

Batch Molecular Weight: 299.2

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water 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:

Gal *et al* (2005) Novel multifunctional neuroprotective iron chelator-monoamine oxidase inhibitor drugs for neurodegenerative diseases. In vivo selective brain monoamine oxidase inhibition and prevention of MPTP-induced striatal dopamine depletion. J.Neurochem. ***95*** 79. PMID: 16181414.

Zheng *et al* (2005) Novel potential neuroprotective agents with both iron chelating and amino acid-based derivatives targeting central nervous system neurons. Biochem.Pharmacol. ***70*** 1642. PMID: 16226724.

Zheng (2005) Novel multifunctional neuroprotective iron chelator-monoamine oxidase inhibitor drugs for neurodegenerative diseases: in vitro studies on antioxidant activity, prevention of lipid peroxide formation and monoamine oxidase inhibition. J.Neurochem. ***95*** 68. PMID: 16181413.

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