

Certificate of Analysis

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Product Name: Lazabemide hydrochloride

Catalog No.: 2460

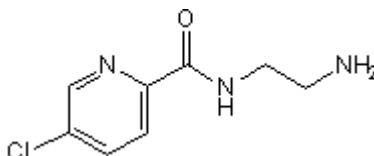
Batch No.: 1

CAS Number: 103878-83-7

IUPAC Name: *N*-(2-Aminoethyl)-5-chloro-2-pyridinecarboxamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₁₀ClN₃O.HCl
Batch Molecular Weight: 236.1
Physical Appearance: White crystalline solid
Solubility: water to 100 mM
DMSO to 100 mM
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.48 (Dichloromethane:Methanol:Acetic acid [8:2:0.1])
HPLC: Shows 98.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	40.7	4.7	17.8	30.03
Found	40.48	4.66	17.66	29.89

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

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Description:

Selective, reversible monoamine oxidase B (MAO-B) inhibitor (IC₅₀ values are 0.03 and > 100 μM for MAO-B and MAO-A respectively). Inhibits monoamine uptake at high concentrations (IC₅₀ values are 86, 123 and > 500 μM for noradrenalin, serotonin and dopamine uptake respectively).

Physical and Chemical Properties:

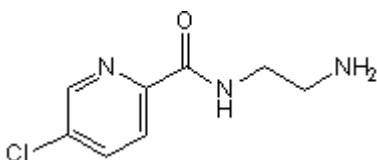
Batch Molecular Formula: C₈H₁₀ClN₃O.HCl

Batch Molecular Weight: 236.1

Physical Appearance: White crystalline solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

DMSO to 100 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival.

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:

Saura et al (1992) Quantitative enzyme radioautography with ³H-Ro 41-1049 and ³H-Ro 19-6327 *in vitro*: localization and abundance of MAO-A and MAO-B in rat CNS, peripheral organs, and human brain. *J.Neurosci.* **12** 1977. PMID: 1578281.

Bondiolotti et al (1995) *In vitro* effects on monoamine uptake and release by the reversible monoamine oxidase-B inhibitors lazabemide and *N*-(2-aminoethyl)-*p*-chlorobenzamide: a comparison with L-deprenyl. *Biochem.Pharmacol.* **50** 97. PMID: 7605351.

Guimaraes and Soares-da-Silva (1998) The activity of MAO A and B in rat renal cells and tubules. *Life Sci.* **62** 727. PMID: 9489509.

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