

Certificate of Analysis

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Product Name: Guvacine hydrochloride

Catalog No.: 0234

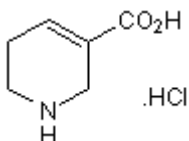
Batch No.: 18

CAS Number: 6027-91-4

IUPAC Name: 1,2,5,6-Tetrahydropyridine-3-carboxylic acid hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆H₉NO₂·HCl
Batch Molecular Weight: 163.6
Physical Appearance: White crystalline solid
Solubility: water to 100 mM
 phosphate buffered saline to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.26 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: Greater than 250°C
HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	44.05	6.16	8.56
Found	43.75	6.26	8.41

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

Product Information

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IUPAC Name: 1,2,5,6-Tetrahydropyridine-3-carboxylic acid hydrochloride

Description:

Specific GABA uptake inhibitor. IC₅₀ values are 14, 58, 119 and 1870 µM for hGAT-1, rGAT-2, hGAT-3 and hBGT-1 respectively.

Physical and Chemical Properties:

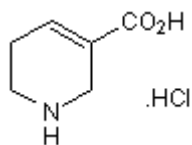
Batch Molecular Formula: C₆H₉NO₂.HCl

Batch Molecular Weight: 163.6

Physical Appearance: White crystalline solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water to 100 mM

phosphate buffered saline 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:

Krogsgaard-Larsen *et al* (1978) Structure-activity studies on the inhibition of GABA binding to rat brain membranes by muscimol and related compounds. *J.Neurochem.* **30** 1377. PMID: 670980.

Borden *et al* (1994) Tiagabine, SK&F 89976-A, CI 966, and NNC-711 are selective for the cloned GABA transporter GAT-1. *Eur.J.Pharmacol.* **269** 219. PMID: 7851497.

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