Certificate of Analysis

Product Name: **Isoguvacine hydrochloride** **Catalog No.: 0235** **Batch No.: 21**

CAS Number: 68547-97-7

IUPAC Name: 1,2,3,6-Tetrahydro-4-pyridinecarboxylic acid hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_6H_9NO_2.HCl$

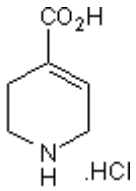
Batch Molecular Weight: 163.6

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.32 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: Greater than 260°C(dec)

HPLC: Shows 100% purity

^{1}H NMR: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	44.05	6.16	8.56
Found	44.14	6.26	8.39

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **Isoguvacine hydrochloride** **Catalog No.: 0235** **Batch No.: 21**

CAS Number: 68547-97-7

IUPAC Name: 1,2,3,6-Tetrahydro-4-pyridinecarboxylic acid hydrochloride

Description:

Specific $GABA_A$ receptor agonist. Suppresses low magnesium induced seizure like events in organotypic hippocampal brain slices.

Physical and Chemical Properties:

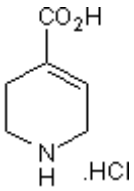
Batch Molecular Formula: $C_6H_9NO_2.HCl$

Batch Molecular Weight: 163.6

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

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:

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.

Krogsgaard-Larsen *et al* (1979) Dihydromuscimol, thiomuscimol and related heterocyclic compounds as GABA analogues. J.Neurochem. ***32*** 1717. PMID: 448364.

Wahab *et al* (2009) Effects of gamma-aminobutyric acid (GABA) agonists and a GABA uptake inhibitor on pharmacoresistant seizure like events in organotypic hippocampal slice cultures. Epilepsy Res. ***86*** 113. PMID: 19535226.

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956