

Certificate of Analysis

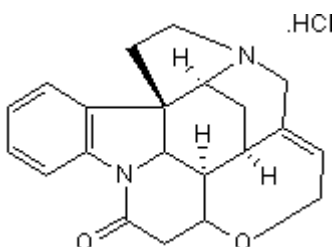
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Product Name: Strychnine hydrochloride
CAS Number: 1421-86-9
IUPAC Name: Strychnidin-10-one hydrochloride

Catalog No.: 2785
Batch No.: 2
EC Number: 215-826-9

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{22}N_2O_2 \cdot HCl \cdot 1\frac{3}{4}H_2O$
Batch Molecular Weight: 402.39
Physical Appearance: White solid
Solubility: water to 50 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: $[\alpha]_D = -28.6$ (Concentration = 0.7, Solvent = Water)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	62.68	6.64	6.96
Found	62.71	6.62	7.11

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

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Description:

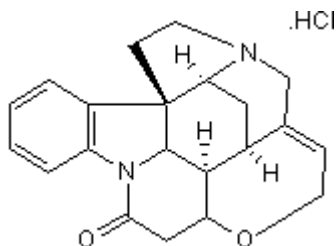
Competitive glycine receptor antagonist; convulsant. Also nicotinic receptor antagonist; displays competitive antagonism at $\alpha 7$ receptors and non-competitive antagonism at $\alpha 4\beta 2$ receptors.

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Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Matabayashi et al (1998) Strychnine: a potent competitive antagonist of α -bungarotoxin-sensitive nicotinic acetylcholine receptors in rat hippocampal neurons. *J.Pharmacol.Exp.Ther.* **284** 904. PMID: 9495848.
Betz et al (2006) Glycine receptors: recent insights into their structural organization and functional diversity. *J.Neurochem.* **67** 1600.

Storage: Store at RT

Solubility & Usage Info:

water to 50 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.

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