

Certificate of Analysis

Print Date: Jan 14th 2016

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Product Name: SIB 1508Y maleate Catalog No.: 4766 Batch No.: 1

CAS Number: 192231-16-6

IUPAC Name: 3-Ethynyl-5-[(2S)-1-methyl-2-pyrrolidinyl]pyridine maleate salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{12}H_{14}N_2.C_4H_4O_4$

Batch Molecular Weight: 302.33

Physical Appearance: Off-white solid

Solubility: water to 100 mM

DMSO to 50 mM

Storage: Desiccate at RT

Batch Molecular Structure:

.C₄H₄O₄

2. ANALYTICAL DATA

TLC: $R_f = 0.17 \text{ (Chloroform:Methanol [95:5])}$

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -13$ (Concentration = 1, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.56 6 9.27 Found 63.3 5.89 9.22



Product Information

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Description:

Potent neuronal nicotinic ACh receptor agonist (EC $_{50}$ values are 1.8, 5, 9 and 23 nM for $\alpha4\beta2$, $\alpha2\beta4$, $\alpha4\beta4$ and $\alpha3\beta4$ receptors respectively). Improves cognitive function in a MPTP-induced model of Parkinson's Disease in vivo.

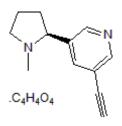
Physical and Chemical Properties:

Batch Molecular Formula: C₁₂H₁₄N₂.C₄H₄O₄

Batch Molecular Weight: 302.33 Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM DMSO 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.

References:

Cosford et al (1996) (S)-(-)-5-ethynyl-3-(1-methyl-2-pyrrolidinyl)pyridine maleate (SIB-1508Y): a novel anti-parkinsonian agent with selectivity for neuronal nicotinic acetylcholine receptors. J.Med.Chem. **39** 3235. PMID: 8765504.

Schneider *et al* (1999) Nicotinic acetylcholine receptor agonist SIB-1508Y improves cognitive functioning in chronic low-dose MPTP-treated monkeys. J.Pharmacol.Exp.Ther. **290** 731. PMID: 10411585.