

Certificate of Analysis

Print Date: Jan 16th 2016

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Product Name: SSR 180711 hydrochloride Catalog No.: 5559 Batch No.: 1

CAS Number: 446031-79-4

IUPAC Name: 4-Bromophenyl 1,4-diazabicyclo[3.2.2]nonane-4-carboxylate hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₇BrN₂O₂.HCl.½H₂O

Batch Molecular Weight: 370.67 **Physical Appearance:** White solid

Solubility: water to 100 mM

DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

HCI

2. ANALYTICAL DATA

TLC: $R_f = 0.38$ (Chloroform:Methanol [9:1])

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 45.36 5.17 7.56 Found 45.36 5.17 7.68



Product Information

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IUPAC Name: 4-Bromophenyl 1,4-diazabicyclo[3.2.2]nonane-4-carboxylate hydrochloride

Description:

Partial agonist at α7 nAChR. Enhances episodic memory and reverses MK-801-induced deficits in retention of episodic memory. Increases extracellular dopamine levels in rat prefrontal cortex. Also exhibits antidepressant-like properties.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{14}H_{17}BrN_2O_2.HCI.1/2H_2O$

Batch Molecular Weight: 370.67 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

water to 100 mM DMSO 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:

Pichat *et al* (2007) SSR180711, a novel selective α7 nicotinic receptor partial agonist: (II) efficacy in experimental models predictive of activity against cognitive symptoms of schizophrenia. Neuropsychopharmacology *32* 17. PMID: 16936709.

Jones *et al* (2014) Effect of α7 nicotinic acetylcholine receptor agonists on attentional set-shifting impairment in rats. Psychopharmacology (Berl). *231* 673. PMID: 24057763.