Print Date: Oct 25th 2012

Certificate of Analysis

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Product Name: **RJR 2403 oxalate** **Catalog No.: 1053** **Batch No.: 2**

CAS Number: 220662-95-3

IUPAC Name: (*E*)-*N*-Methyl-4-(3-pyridinyl)-3-buten-1-amine oxalate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{10}H_{14}N_2.C_4H_4O_4$

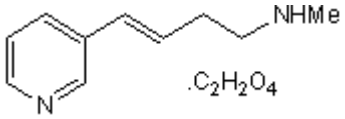
Batch Molecular Weight: 252.27

Physical Appearance: white solid

Solubility: water to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.31 (Chloroform:Methanol:Ammonia soln. [9:1:3])

HPLC: Shows 100% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	57.13	6.39	11.1
Found	56.89	6.38	11.1

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

Tocris Bioscience is an R&D Systems company

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Description:

A neuronal nicotinic receptor agonist, showing high selectivity for the α4β2 subtype (K_i values are 26 and 36000 nM for α4β2 and α7 receptors respectively). Active in vivo.

Physical and Chemical Properties:

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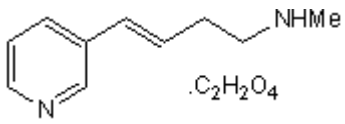
Batch Molecular Weight: 252.27

Physical Appearance: white solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at +4°C

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:

Bencherif *et al* (1996) RJR-2403: a nicotinic agonist with CNS selectivity I. *In vitro* characterization. J.Pharmacol.Exp.Ther. ***279*** 1413. PMID: 8968366.

Lippiello *et al* (1996) RJR-2403: a nicotinic agonist with CNS selectivity II. *In vivo* characterization. J.Pharmacol.Exp.Ther. ***279*** 1422. PMID: 8968367.

Damaj *et al* (1999) Antinociceptive and pharmacological effects of metanicotine, a selective nicotinic agonist. J.Pharmacol.Exp.Ther. ***291*** 390. PMID: 10490929.