Print Date: May 26th 2018

# Certificate of Analysis

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**Product Name:** **Ro 8-4304 hydrochloride** **Catalog No.: 3343** **Batch No.: 1**

CAS Number: 1312991-77-7

IUPAC Name: 4-[3-[4-(4-Fluorophenyl)-1,2,3,6-tetrahydro-1(2*H*)-pyridinyl]-2-hydroxypropoxy]benzamide hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{21}H_{23}FN_2O_3.HCl.½H_2O$

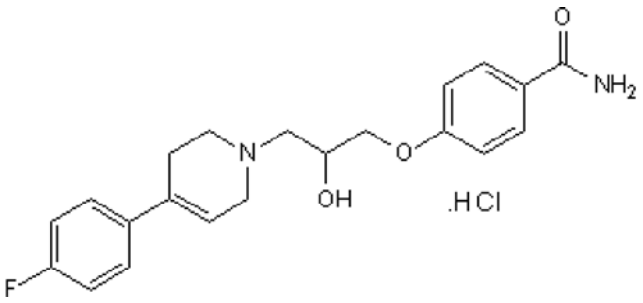
**Batch Molecular Weight:** 415.89

**Physical Appearance:** Off-white solid

**Solubility:** water to 10 mM
DMSO to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**TLC:** $R_f$ = 0.56 (Dichloromethane:Methanol [9:1])

**HPLC:** Shows 99.7% purity

**$^1$H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

| | Carbon | Hydrogen | Nitrogen |
|---|---|---|---|
| Theoretical | 60.65 | 6.06 | 6.74 |
| Found | 60.9 | 5.93 | 6.79 |



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# Product Information



**Product Name:** **Ro 8-4304 hydrochloride** **Catalog No.: 3343** **Batch No.: 1**

CAS Number: 1312991-77-7

IUPAC Name: 4-[3-[4-(4-Fluorophenyl)-1,2,3,6-tetrahydro-1(2*H*)-pyridinyl]-2-hydroxypropoxy]benzamide hydrochloride

**Description:**

NMDA receptor antagonist ($IC_{50}$ = 0.4 µM) that displays > 100 fold selectivity for GluN2B (formally NR2B) containing receptors over GluN2A (formally NR2A) containing receptors. Exhibits an activity-dependent mechanism of NMDA antagonism and is competitive with respect to spermine (Cat. No. 0958). Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

**Physical and Chemical Properties:**

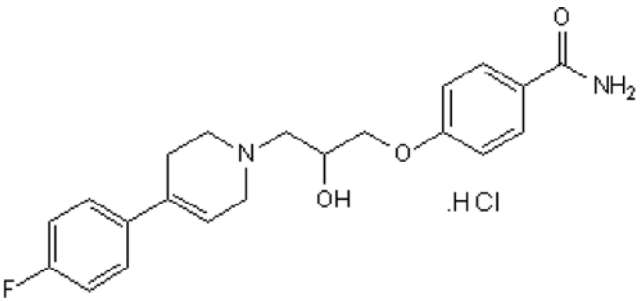
Batch Molecular Formula: $C_{21}H_{23}FN_2O_3.HCl.½H_2O$

Batch Molecular Weight: 415.89

Physical Appearance: Off-white solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**




**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 10 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:**

**Kew** *et al* (1998) State-dependent NMDA receptor antagonism by Ro 8-4304, a novel NR2B selective, non-competitive, voltage-independent antagonist. Br.J.Pharmacol. ***123*** 463. PMID: 9504387.

**Kew and Kemp** (1998) An allosteric interaction between the NMDA receptor polyamine and ifenprodil sites in rat cultured cortical neurones. J.Physiol. ***512*** 17. PMID: 9729614.