

Certificate of Analysis

Print Date: May 23rd 2022

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Product Name: U 89843A Catalog No.: 2734 Batch No.: 2

CAS Number: 157013-85-9

IUPAC Name: 6,7-Dimethyl-2,4-di-1-pyrrolidinyl-7*H*-pyrrolo[2,3-*d*]pyrimidine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₃N₅.HCl

Batch Molecular Weight: 321.85

Physical Appearance: Off-white solid
Solubility: water to 25 mN

water to 25 mM DMSO to 50 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: R_f = 0.67 (Chloroform:Methanol:Ammonia soln. [95:5:0.1])

HPLC: Shows >99.2% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 59.71 7.52 21.76 Found 59.4 7.52 21.41

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

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Product Information

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Description:

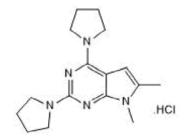
U 89843A is a positive allosteric modulator of GABA_A receptors. Enhances GABA-induced CI- currents in the $\alpha_1\beta_2\gamma_2$, $\alpha_3\beta_2\gamma_2$ and $\alpha_6\beta_2\gamma_2$ subtypes. Causes sedation in vivo following i.v. administration without losing "righting reflex". Also displays antioxidant activity.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₆H₂₃N₅.HCl Batch Molecular Weight: 321.85 Physical Appearance: Off-white solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 25 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:

Rohn *et al* (1996) Inhibition of Ca²⁺-pump ATPase and the Na⁺/K⁺-pump ATPase by iron-generated free radicals. Biochem.Pharmacol. *51* 471. PMID: 8619892.

Bundy *et al* (1995) Synthesis of novel 2,4-diaminopyrrolo-[2,3-*d*]pyrimidines with antioxidant, neuroprotective, and antiasthma activity. J.Med.Chem. *38* 4161. PMID: 7473542.

Haesook *et al* (1995) U-89843A is a novel allosteric modulator of γ-aminobutyric acid_A receptors. J.Pharmacol.Exp.Ther. **275** 1390. PMID: 8531107.