

Certificate of Analysis

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Product Name: RS 25344 hydrochloride

Catalog No.: 3315

Batch No.: 1

CAS Number: 152815-28-6

IUPAC Name: 1-(3-Nitrophenyl)-3-(4-pyridinylmethyl)-pyrido[2,3-d]pyrimidine-2,3-(1*H*,3*H*)-dione hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₁₃N₅O₄·HCl·¼H₂O

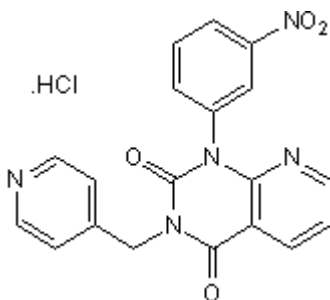
Batch Molecular Weight: 416.3

Physical Appearance: White solid

Solubility: water to 50 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.75 (Dichloromethane:Methanol [9:1])

HPLC: Shows >99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.82	3.51	16.82
Found	54.96	3.25	16.66

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

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Description:

Potent and selective phosphodiesterase (PDE) 4 inhibitor (IC₅₀ values are 0.28, > 100, 160 and 330 nM at PDE4, PDE1, PDE2 and PDE3 respectively). Inhibits eosinophil chemotaxis and increases progressive motility of spermatozoa in vitro.

Physical and Chemical Properties:

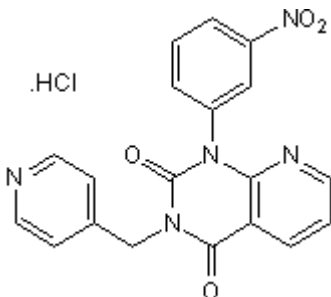
Batch Molecular Formula: C₁₉H₁₃N₅O₄.HCl.¼H₂O

Batch Molecular Weight: 416.3

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 50 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:

Alvarez *et al* (1995) Activation and selective inhibition of a cyclic AMP-specific phosphodiesterase, PDE-4D3. *Mol.Pharmacol.* **48** 616. PMID: 7476886.

Kaneko *et al* (1995) Elevated intracellular cyclic AMP inhibits chemotaxis in human eosinophils. *Cell.Signal.* **7** 527. PMID: 8562314.

Bajpai *et al* (2006) AKAP3 selectively binds PDE4A isoforms in bovine spermatozoa. *Biol.Reprod.* **74** 109. PMID: 16177223.

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