

Certificate of Analysis

Print Date: Jun 29th 2016

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Product Name: Etazolate hydrochloride Catalog No.: 0438 Batch No.: 4

CAS Number: 35838-58-5

IUPAC Name: 1-Ethyl-4-[(1-methylethylidene)hydrazino]-1*H*-pyrazolo-[3,4-*b*]-pyridine-5-carboxylic acid, ethyl ester hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_{19}N_5O_2.HCI$

Batch Molecular Weight: 325.8

Physical Appearance: White solid

Solubility: water to 50 mM
DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.84$ (Chloroform:Methanol [9:1])

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 51.61 6.19 21.5 Found 51.37 6.08 21.51



Product Information

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IUPAC Name: 1-Ethyl-4-[(1-methylethylidene)hydrazino]-1*H*-pyrazolo-[3,4-*b*]-pyridine-5-carboxylic acid, ethyl ester hydrochloride

Description:

Phosphodiesterase inhibitor, selective for PDE4 ($IC_{50} = 2.0 \mu M$).

Physical and Chemical Properties:

Batch Molecular Formula: C₁₄H₁₉N₅O₂.HCl

Batch Molecular Weight: 325.8 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store 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:

Ahluwalia and Nicholson et al (1991) Differential modulation of tissue function and therapeutic potential of selective inhibitors of cyclic nucleotide phosphodiesterase isoenzymes. TiPS 12 19. PMID: 1848733.

Rhoads (1982) Selective inhibition of cyclic AMP and cyclic GMP phosphodiesterases of cardiac nuclear fraction. Biochem.Pharmacol. **31** 665. PMID: 6177320.

Chesin *et al* (1972) 1-Ethyl-4-(isopropylidenehydrazinol-H-pyrazolo-(3,4-b)-pyridin-5-carboxylic acid, ethyl ester, hydrochloride (SQ 20009) - potent new inhibitor of cyclic 3'5-nucleotide phosphodiesterase. Biochem.Pharmacol. *21* 2443. PMID: 4345859.