

Certificate of Analysis

Print Date: Jul 18th 2019

Batch No.: 3

www.tocris.com

Catalog No.: 2315

Product Name: Immethridine dihydrobromide

CAS Number: 699020-93-4

IUPAC Name: 4-(1*H*-Imidazol-4-ylmethyl)pyridine dihydrobromide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉H₉N₃.2HBr

Batch Molecular Weight: 321.01

Physical Appearance: White solid

Solubility: water to 100 mM Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 33.67 3.45 13.08 Found 33.43 3.48 12.72



Product Information

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IUPAC Name: 4-(1*H*-Imidazol-4-ylmethyl)pyridine dihydrobromide

Description:

Potent and highly selective histamine H_3 receptor agonist (pEC $_{50}$ = 9.74) that displays 300-fold selectivity over the H_4 receptor (pK $_{\rm i}$ values are 9.07 and 6.61 respectively). Does not bind to H_1 or H_2 receptors at concentrations up to 10 $\mu M_{\rm i}$.

Physical and Chemical Properties:

Batch Molecular Formula: C₉H₉N₃.2HBr

Batch Molecular Weight: 321.01 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at RT

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).

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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:

Kitbunnadaj *et al* (2004) Identification of 4-(1*H*-imidazol-4(5)-ylmethyl)pyridine (immethridine) as a novel, potent, and highly selective histamine H₃ receptor agonist. J.Med.Chem. **47** 2414. PMID: 15115383.