



Certificate of Analysis

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Product Name: Mepyramine maleate Catalog No.: 0660 Batch No.: 2

CAS Number: 59-33-6 EC Number: 200-422-7

IUPAC Name: 2-((2-(Dimethylamino)ethyl)(p-methoxybenzyl)amino)-pyridine maleate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{23}N_3O_1.C_4H_4O_4$

Batch Molecular Weight: 401.46 **Physical Appearance:** White solid

Solubility: phosphate buffered saline to 100 mM

water to 100 mM DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.67$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: At 104°C

¹H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 62.83 6.78 10.47 0 0 0 Found 62.94 6.8 10.56 0 0 0





Product Information

Print Date: Apr 28th 2015

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IUPAC Name: 2-((2-(Dimethylamino)ethyl)(p-methoxybenzyl)amino)-pyridine maleate

Description:

Selective inverse agonist for the H_1 receptor. Inhibits histamine induced inositol phosphate (InsP) production (log EC₅₀ = -7.94) and intracellular calcium mobilization. Sequesters $G_{q/11}$ protein, reducing its availability for other receptors associated with the same signaling pathway.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₂₃N₃O₁.C₄H₄O₄

Batch Molecular Weight: 401.46 Physical Appearance: White solid

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

phosphate buffered saline to 100 mM water to 100 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:

Hill (1990) Distribution, properties and functional characteristics of three classes of histamine receptor. Pharmacol.Rev. 42 45. PMID: 2164693.

Liu *et al* (1994) Does the [³H] mepyramine binding site represent the histamine H₁ receptor? Re-examination of the histamine H₂ receptor with quinine. J.Pharmacol.Exp.Ther. **268** 959. PMID: 8114011.

Carlos et al (2004) Mepyramine, a histamine H₁ receptor inverse agonist, binds perferentially to a G protein-coupled form of the receptor and sequesters G protein. J.Biol.Chem. **279** 34431. PMID: 15192105.

