

Certificate of Analysis

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Product Name: Mepyramine maleate

Catalog No.: 0660

Batch No.: 2

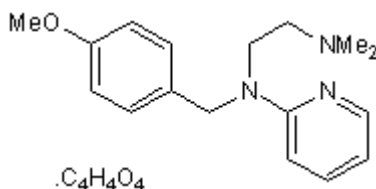
CAS Number: 59-33-6

EC Number: 200-422-7

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{23}N_3O_1 \cdot C_4H_4O_4$
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
Found	62.94	6.8	10.56	0	0

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

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Description:

Selective inverse agonist for the H₁ 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.

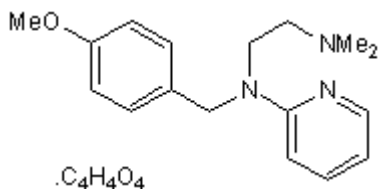
Physical and Chemical Properties:

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 preferentially to a G protein-coupled form of the receptor and sequesters G protein. *J.Biol.Chem.* **279** 34431. PMID: 15192105.

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