

Product Name: Phentolamine Mesylate

Catalog No.: 6431

Batch No.: 1

CAS Number: 65-28-1

IUPAC Name: 3-[[[4,5-Dihydro-1*H*-imidazol-2-yl)methyl](4-methylphenyl)amino]phenol methanesulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₉N₃O·CH₄O₃S

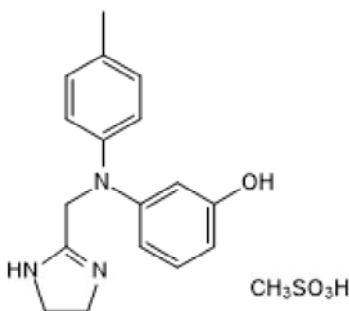
Batch Molecular Weight: 377.46

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM
ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	57.28	6.14	11.13
Found	57.26	6.17	11.1

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Description:

Phentolamine Mesylate is a non-selective adrenergic α receptor antagonist ($pK_B = 8.07$). Intravenous injection causes hypotension and tachycardia in rats. Intraperitoneal injection in mice increases plasma FGF21 levels.

Physical and Chemical Properties:

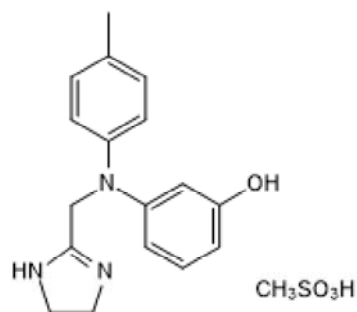
Batch Molecular Formula: $C_{17}H_{19}N_3O.CH_4O_3S$

Batch Molecular Weight: 377.46

Physical Appearance: White solid

Minimum Purity: $\geq 98\%$

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

water to 100 mM
DMSO to 100 mM
ethanol 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:

Fioretti *et al* (2017) Renal and femoral venous blood flows are regulated by different mechanisms dependent on α -adrenergic receptor subtypes and nitric oxide in anesthetized rats. *Vascul.Pharmacol.* **99** 53. PMID: 28986330.

Nonogaki & Kaji (2017) $\alpha 1$ -adrenergic receptor downregulated hepatic FGF21 production and circulating FGF21 levels in mice. *Neurosci.Lett.* **18** 35. PMID: 27939978.

Liu & Coupar (1996) Evidence for functional alpha 2D-adrenoceptors in the rat intestine. *Br.J.Pharmacol.* **117** 787. PMID: 8851491.

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