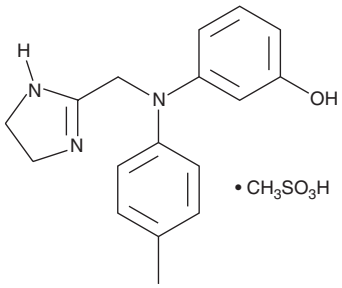
PRODUCT INFORMATION

Phentolamine (mesylate)

Item No. 16135

CAS Registry No.:	65-28-1
Formal Name:	3-[[(4,5-dihydro-1H-imidazol-2-yl) methyl](4-methylphenyl)amino]-phenol, monomethanesulfonate
MF:	$C_{17}H_{19}N_3O \bullet CH_3SO_3H$
FW:	377.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 209, 277 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Phentolamine (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the phentolamine (mesylate) in the solvent of choice, which should be purged with an inert gas. Phentolamine (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of phentolamine (mesylate) in these solvents is approximately 15, 30, and 50 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of phentolamine (mesylate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of phentolamine (mesylate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Phentolamine is a reversible antagonist of α-adrenergic receptors, non-specifically binding all α_1- and α_2-adrenoceptors with nanomolar affinities.[1-4] Formulations containing phentolamine have been used in the treatment of hypertensive emergencies, as well as chronic and emergent pain.

References

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2. Millan, M.J., Newman-Tancredi, A., Audinot, V., *et al. Synapse* **35(2)**, 79-95 (2000).
3. O'Rourke, M.F., Iversen, L.J., Lomasney, J.W., *et al. J. Pharmacol. Exp. Ther.* **271(2)**, 735-740 (1994).
4. Richelson, E. and Nelson, A. J. *Pharmacol. Exp. Ther.* **230(1)**, 94-102 (1984).

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