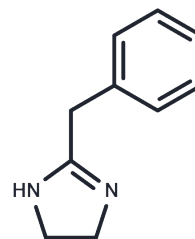


Tolazoline

Chemical Properties

CAS No. :	59-98-3
Formula:	C10H12N2
Molecular Weight:	160.22
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Tolazoline (Benzalolin), a non-selective competitive α -adrenergic receptor antagonist, is used as a vasodilator to treat spasms of peripheral blood vessels. It has also been used successfully as an antidote to reverse the severe peripheral vasoconstriction as a result of overdose with certain 5-HT _{2A} agonist drugs.
Targets(IC50)	Adrenergic Receptor

Solubility Information

Solubility	DMSO: 55 mg/mL (343.28 mM), Sonication is recommended. H ₂ O: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (31.21 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.2414 mL	31.2071 mL	62.4142 mL
5 mM	1.2483 mL	6.2414 mL	12.4828 mL
10 mM	0.6241 mL	3.1207 mL	6.2414 mL
50 mM	0.1248 mL	0.6241 mL	1.2483 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Casbeer HC, Knych HK. Pharmacokinetics and pharmacodynamic effects of tolazoline following intravenous administration to horses. *Vet J.* 2013 Jun;196(3):504-9.
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- Yokota S, Hikasa Y, Shimura I, Kusunose S. Effects of imidazoline and nonimidazoline alpha-adrenergic agents, including xylazine, medetomidine, yohimbine, tolazoline, and atipamezole, on aggregation of bovine and equine platelets. *Am J Vet Res.* 2013 Mar;74(3):395-402.
- Contreras CD, Ledesma AE, Zinzuk J, Brandán SA. Vibrational study of tolazoline hydrochloride by using FTIR-Raman and DFT calculations. *Spectrochim Acta A Mol Biomol Spectrosc.* 2011 Sep;79(5):1710-4.
- Mortenson JA, Robison JA. Tolazoline-induced apnea in mule deer (*Odocoileus hemionus*). *J Zoo Wildl Med.* 2011 Mar;42(1):105-7.

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