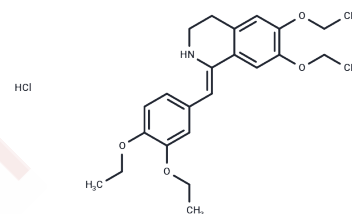


Drotaverine hydrochloride

Chemical Properties

CAS No. :	985-12-6
Formula:	C ₂₄ H ₃₂ ClNO ₄
Molecular Weight:	433.968
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	Drotaverine hydrochloride is a type 4 cyclic nucleotide phosphodiesterase (PDE4) inhibitor, and is an antispasmodic drug, used to enhance cervical dilation during childbirth. Drotaverine hydrochloride is structurally related to papaverine
Targets(IC50)	Calcium Channel, PDE
In vitro	drotaverine not only relaxed the precontracted tracheal preparations but also decreased mediator-induced contraction. These effects of drotaverine were concentration dependent, with a significantly higher potency on the KCl-induced response, than on either the histamine or methacholine induced one. A similar result was noted for nifedipine. The PDE inhibitor, theophylline, also relaxed the precontracted preparations but was ineffective on the mediator-induced contraction in a physiologically relevant concentration range.

Solubility Information

Solubility	DMSO: 25 mg/mL (57.61 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.61 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	2.3043 mL	11.5215 mL	23.0431 mL
5 mM	0.4609 mL	2.3043 mL	4.6086 mL
10 mM	0.2304 mL	1.1522 mL	2.3043 mL
50 mM	0.0461 mL	0.2304 mL	0.4609 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

Patai, Zoltán, Guttman, András, Mikus E . Assessment of the Airway Smooth Muscle Relaxant Effect of Drotaverine [J]. Pharmacology, 2018:163.

Vyom, Aggarwal. Drotaverine for Recurrent Abdominal Pain in Children.[J]. Indian Pediatrics, 2015.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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