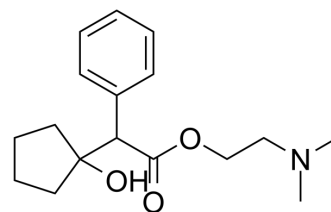


## Cyclopentolate hydrochloride

<b>Cat. No.:</b>	HY-B1621A
<b>CAS No.:</b>	5870-29-1
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>26</sub> ClNO <sub>3</sub>
<b>Molecular Weight:</b>	327.85
<b>Target:</b>	mAChR
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



H-Cl

### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 250 mg/mL (762.54 mM; Need ultrasonic)				
	H <sub>2</sub> O : 100 mg/mL (305.02 mM; Need ultrasonic)				
		<b>Solvent</b>	<b>Mass</b>		
		<b>Concentration</b>			
<b>Preparing Stock Solutions</b>			<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>1 mM</b>	3.0502 mL	15.2509 mL	30.5018 mL
		<b>5 mM</b>	0.6100 mL	3.0502 mL	6.1004 mL
		<b>10 mM</b>	0.3050 mL	1.5251 mL	3.0502 mL
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (305.02 mM); Clear solution; Need ultrasonic				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Cyclopentolate (DL-Cyclopentolate) hydrochloride is an Atropine-like muscarinic receptors antagonist with a pK <sub>B</sub> value of 7.8 (on the circular ciliary muscle). Cyclopentolate hydrochloride is an anti-muscarinic agent commonly used in the ophthalmologic practice <sup>[1][2]</sup> .	
<b>In Vivo</b>	Survival in rats pretreated with cyclopentolate (20 mg/kg) is 90% <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	<b>Animal Model:</b>	Eighty Sprague-Dawley rats (acute, lethal organophosphate pesticide (OP) poisoning model) <sup>[3]</sup>
	<b>Dosage:</b>	20 mg/kg (Ophthalmic cyclopentolate)

Administration:	i.p.
Result:	Survival in rats pretreated with ophthalmic cyclopentolate (20 mg/kg) is 90%.

## REFERENCES

[1]. Öner V, Bulut A, Öter K. The effect of topical anti-muscarinic agents on subfoveal choroidal thickness in healthy adults. *Eye (Lond)*. 2016;30(7):925-928.

[2]. Ishikawa H, DeSantis L, Patil PN. Selectivity of muscarinic agonists including (+/-)-aceclidine and antimuscarinics on the human intraocular muscles. *J Ocul Pharmacol Ther*. 1998;14(4):363-373.

[3]. Öner V, Bulut A, Öter K. The effect of topical anti-muscarinic agents on subfoveal choroidal thickness in healthy adults. *Eye (Lond)*. 2016;30(7):925-928.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA