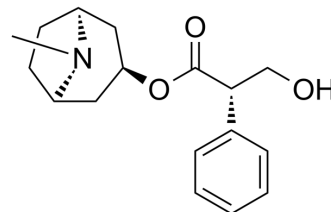


## L-Hyoscyamine

<b>Cat. No.:</b>	HY-N0471		
<b>CAS No.:</b>	101-31-5		
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>23</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	289.37		
<b>Target:</b>	mAChR		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (345.58 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	3.4558 mL	17.2789 mL	34.5578 mL
		5 mM	0.6912 mL	3.4558 mL	6.9116 mL
10 mM		0.3456 mL	1.7279 mL	3.4558 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (8.64 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.64 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (8.64 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	L-Hyoscyamine (Daturine), a natural plant tropane alkaloid, is a potent and competitive muscarinic receptor (MR) antagonist. L-Hyoscyamine is a levo-isomer to Atropine (HY-B1205) <sup>[1][2]</sup> .
<b>In Vivo</b>	L-Hyoscyamine (Daturine; 5-20 mg/kg; iv) prolongs the migrating MMC cycle length <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Rats <sup>[1]</sup>
Dosage:	5, 10, 20 mg/kg
Administration:	IV
Result:	Prolonged the migrating myoelectric complex (MMC) cycle length.

## CUSTOMER VALIDATION

- ACS Catal. 2021 Feb 18.
- Food Chem. 2021 Feb 1;337:127617.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Lars Göran Axelsson, et al. Regulatory role of 5-HT and muscarinic receptor antagonists on the migrating myoelectric complex in rats. Eur J Pharmacol. 2003 Apr 25;467(1-3):211-8.

[2]. Harald John, et al. Application of an enantioselective LC-ESI MS/MS procedure to determine R- and S-hyoscyamine following intravenous atropine administration in swine. Drug Test Anal. Mar-Apr 2012;4(3-4):194-8.

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

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