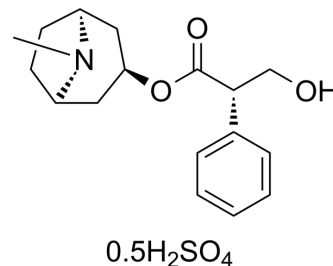


L-Hyoscyamine sulfate

Cat. No.:	HY-N0471A
CAS No.:	620-61-1
Molecular Formula:	C ₁₇ H ₂₃ NO ₃ ·1/2H ₂ SO ₄
Molecular Weight:	338.41
Target:	mAChR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	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)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 25 mg/mL (73.87 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		2.9550 mL	14.7750 mL	29.5500 mL
		5 mM		0.5910 mL	2.9550 mL	5.9100 mL
	10 mM		0.2955 mL	1.4775 mL	2.9550 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (7.39 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.39 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.39 mM); Clear solution 					

BIOLOGICAL ACTIVITY

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

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.

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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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