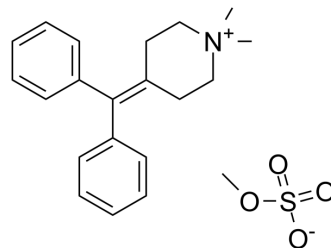


Diphenmanil methylsulfate

Cat. No.:	HY-16171
CAS No.:	62-97-5
Molecular Formula:	C ₂₁ H ₂₇ NO ₄ S
Molecular Weight:	389.51
Target:	mAChR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 16.67 mg/mL (42.80 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions	1 mM	1 mg	5 mg	10 mg
		5 mM	2.5673 mL	12.8366 mL	25.6733 mL
		10 mM	0.5135 mL	2.5673 mL	5.1347 mL
	10 mM	0.2567 mL	1.2837 mL	2.5673 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 50 mg/mL (128.37 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	Diphenmanil methylsulfate is a quaternary ammonium anticholinergic. It binds muscarinic acetylcholine receptors and thereby decreases secretory excretion of stomach acids as well as saliva and sweat. IC50 value: Target: mAChR Diphenmanil Methylsulfate exerts its action by primarily binding the muscarinic M3 receptor. M3 receptors are located in the smooth muscles of the blood vessels, as well as in the lungs. This means they cause vasodilation and bronchoconstriction. They are also in the smooth muscles of the gastrointestinal tract (GIT), which help in increasing intestinal motility and dilating sphincters. The M3 receptors are also located in many glands which help to stimulate secretion in salivary glands and other glands of the body.
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Caution: Product has not been fully validated for medical applications. For research use only.

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