

Data Sheet (Cat.No.T21532)



6-beta-Hydroxyhyoscyamine

Chemical Properties

CAS No.: 55869-99-3 Formula: C17H23NO4

Molecular Weight: 305.37
Appearance: N/A

Storage: $0-4^{\circ}\text{C}$ for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	6-beta-Hydroxyhyoscyamine and 7 beta-hydroxyhyoscyamine exhibit similar affinities at the muscarinic receptor as scopolamine and atropine.	
Targets(IC ₅₀)	AChR: None	
In vitro	METHODS AND RESULTS: Fourteen tropane and related alkaloids were analyzed for their affinity for nicotinic and/or muscarinic acetylcholine receptors. The biogenetic intermediates littorine, 6-beta-Hydroxyhyoscyamine, 7 beta-hydroxyhyoscyamine exhibit similar affinities at the muscarinic receptor as scopolamine and atropine. CONCLUSIONS: The quarternary derivatives N-methylatropine and N-methylscopolamine show the highest binding with IC50 values of less than 100 pM and 300 pM, respectively. The tropane alkaloids (including cocaine) also bind to the nicotinic acetylcholine receptor, albeit with much lower affinities.	

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.275 mL	16.374 mL	32.747 mL
5 mM	0.655 mL	3.275 mL	6.549 mL
10 mM	0.327 mL	1.637 mL	3.275 mL
50 mM	0.065 mL	0.327 mL	0.655 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Binding of tropane alkaloids to nicotinic and muscarinic acetylcholine receptors. Pharmazie. 1995 Jul;50(7):493-5.

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