

McN-A 343

Chemical Properties

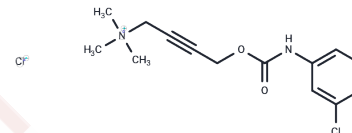
CAS No. : 55-45-8

Formula: C₁₄H₁₈Cl₂N₂O₂

Molecular Weight: 317.21

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	McN-A 343 is a selective M1 muscarinic agonist known for its ability to stimulate muscarinic transmission in sympathetic ganglia. It has been found to effectively reduce inflammation and oxidative stress in experimental models of ulcerative colitis.
Targets(IC50)	AChR
In vivo	After the induction of 6% acetic acid colitis, treatment with McN-A 343 at a concentration of 1.5 mg/kg showed a significant reduction in intestinal damage as well as a decrease in wet weight, MPO activity, pro-inflammatory cytokine concentration, markers of oxidative stress and expression of inflammatory mediator[2].

Solubility Information

Solubility	DMSO: 90 mg/mL (283.72 mM),Sonication is recommended. H ₂ O: < 31.72 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (10.4 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1525 mL	15.7624 mL	31.5249 mL
5 mM	0.6305 mL	3.1525 mL	6.305 mL
10 mM	0.3152 mL	1.5762 mL	3.1525 mL
50 mM	0.063 mL	0.3152 mL	0.6305 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Koss MC, et al. Analysis of miosis produced by McN-A-343 in anesthetized cats. *J Ocul Pharmacol Ther.* 1995;11(3): 389-399.

Magalhães DA, Batista JA, Sousa SG, et al. McN-A-343, a muscarinic agonist, reduces inflammation and oxidative stress in an experimental model of ulcerative colitis. *Life Sci.* 2021;272:119194.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481