Propantheline

Cat. No.: HY-B1188A

CAS No.: 298-50-0

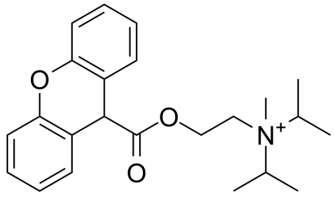
Molecular Formula: $C_{23}H_{30}NO_3^+$

Molecular Weight: 368.49

Target: mAChR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Propantheline is an orally active mAChR antagonist. Propantheline can be used in the research of smooth muscle dysfunction, excessive sweating, cramps or spasms of the stomach, intestines or bladder, and involuntary urination[1][2][3].
IC_{50} & Target	mAChR[1]
In Vitro	Propantheline (10 μM-1 mM) decreases urinary bladder smooth muscle reactivity to Acetylcholine[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Propantheline (oral administration, 10-300 mg/kg) decreased the fecal pellet count and the incidences diarrhea in restraint stress-induced bowel dysfunction rats[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Restraint stress-induced bowel dysfunction models in rats[3]
Dosage:	10-300 mg/kg
Administration:	Oral administration
Result:	Decreased the fecal pellet count with ED_{50} values of 41 mg/kg. Dose-dependently decreased the incidences of diarrhea with ED50 values of 64 mg/kg.

REFERENCES

[1]. J Mokry, et al. Propantheline and in vitro reactivity of urinary bladder smooth muscle in guinea pigs. Bratisl Lek Listy. 2005;106(4-5):151-4.

[2]. Richard Jewell, et al. Propantheline. xPharm: The Comprehensive Pharmacology Reference. 2007, Pages 1-5.

[3]. S Kobayashi, et al. Effects of YM905, a novel muscarinic M3-receptor antagonist, on experimental models of bowel dysfunction in vivo. Jpn J Pharmacol. 2001 Jul;86(3):281-8.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA