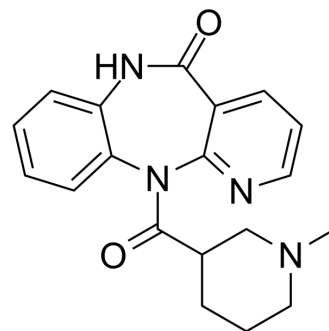


Rispenzepine

Cat. No.:	HY-U00030
CAS No.:	96449-05-7
Molecular Formula:	C ₁₉ H ₂₀ N ₄ O ₂
Molecular Weight:	336.39
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	Rispenzepine is a novel antimuscarinic compound with a preferential action at M ₁ , and M ₃ receptor subtypes.
IC₅₀ & Target	M ₁ , and M ₃ receptor ^[1]
In Vitro	<p>The presence of muscarinic autoreceptors in human and guinea pig trachea is investigated by comparing the effects of the muscarinic receptor antagonists Pirenzepine (M₁), Methoctramine (M₂), 4-DAMP (M₃), and Rispenzepine (M₁/M₃) on cholinergic neural contractile responses evoked by electrical field stimulation (EFS) and [³H]ACh release. The M₁, M₁/M₃, or M₃ antagonists inhibit the EFS-evoked cholinergic contractile response in a concentration-dependent manner (4-DAMP > Rispenzepine > Pirenzepine), whereas Methoctramine facilitates this response at low concentrations (<3 μM). In ACh release studies, the M₃ antagonist has no significant effect, whereas Pirenzepine, Methoctramine, and Rispenzepine significantly increase ACh release in guinea pig trachea. Rispenzepine almost completely inhibits cholinergic, contractile responses at 0.3 μM (92.7±6.2% inhibition, n=6, p<0.05; pD₂ value of 7.31±0.15) ^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Patel HJ, et al. Evidence for prejunctional muscarinic autoreceptors in human and guinea pig trachea. Am J Respir Crit Care Med. 1995 Sep;152(3):872-8.

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