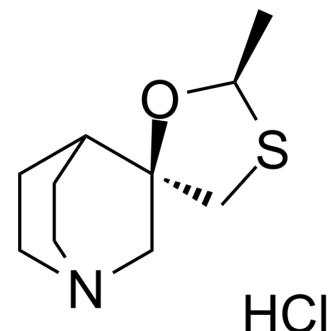


Cevimeline hydrochloride

Cat. No.:	HY-70020B
CAS No.:	107220-28-0
Molecular Formula:	C ₁₀ H ₁₈ ClNOS
Molecular Weight:	235.77
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

H₂O : ≥ 50 mg/mL (212.07 mM)
* "≥" means soluble, but saturation unknown.

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.2414 mL	21.2071 mL	42.4142 mL
	5 mM	0.8483 mL	4.2414 mL	8.4828 mL
	10 mM	0.4241 mL	2.1207 mL	4.2414 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	Cevimeline hydrochloride (AF102B hydrochloride) is a quinuclidine derivative of acetylcholine and a selective and orally active muscarinic M1 and M3 receptor agonist. Cevimeline hydrochloride stimulates secretion by the salivary glands and can be used as a sialogogue for xerostomia ^{[1][2][3][4]} . Cevimeline hydrochloride can cross the blood-brain barrier (BBB) ^[5] .
IC₅₀ & Target	Muscarinic M1 and M3 receptor ^[1]
In Vitro	In digested parotid cells, Cevimeline (0.1-100 μM) increases the intracellular Ca ²⁺ concentration ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Cevimeline (0.008-0.016 mg/kg; intraperitoneal injection; male Wistar rats) treatment shows slowly increasing and lasting salivation, and increased blood flow increment in the parotid gland and pressor response. Cevimeline inhibits angiotensin II-induced water intake and neuronal activity in the subfornical organ at 0.016 mg/kg ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Wistar rats (8-week-old) injected with angiotensin-II ^[1]
Dosage:	0.008 mg/kg, 0.016 mg/kg
Administration:	Intraperitoneal injection
Result:	Showed slowly increasing and lasting salivation, and increased blood flow increment in the parotid gland and pressor response.

REFERENCES

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- [2]. Ono K, et al. Distinct effects of cevimeline and pilocarpine on salivary mechanisms, cardiovascular response and thirst sensation in rats. *Arch Oral Biol*. 2012 Apr;57(4):421-8. Epub 2011 Nov 17.
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- [4]. Voskoboynik B, et al. Cevimeline (Evoxac) overdose. *J Med Toxicol*. 2011 Mar;7(1):57-9.
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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