

Cevimeline (hydrochloride hemihydrate)

Catalog No: tcsc0754



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

153504-70-2

Formula:

$C_{20}H_{35}ClN_2O_2S_2$

Pathway:

Neuronal Signaling;GPCR/G Protein

Target:

mAChR;mAChR

Purity / Grade:

>98%

Solubility:

H₂O : ≥ 50 mg/mL (114.92 mM)

Observed Molecular Weight:

435.09

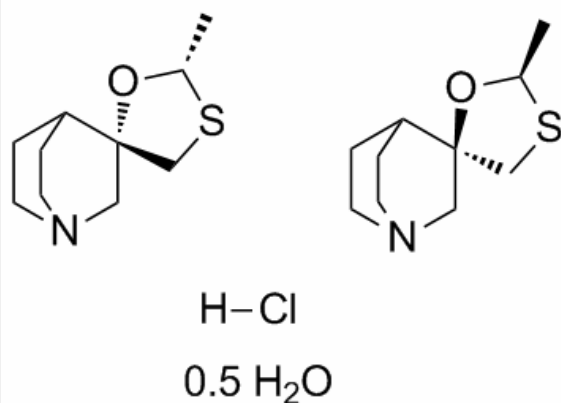
Product Description

Cevimeline hydrochloride hemihydrate, a novel muscarinic receptor agonist, is a candidate therapeutic drug for xerostomia in Sjogren's syndrome.

IC50 value:

Target: mAChR

The general pharmacol. properties of this drug on the gastrointestinal, urinary, and reproductive systems and other tissues were investigated in mice, rats, guinea pigs, rabbits, and dogs. The in vitro metab. of SNI-2011 was also evaluated with rat and dog liver microsomes. After oral administration, plasma concns. of SNI-2011 reached to C_{max} within 1 h in both species, suggesting that SNI-2011 was quickly absorbed, and then decreased with a t_{1/2} of 0.4-1.1 h. The bioavailability was 50% and 30% in rats and dogs, resp. Major metabolites in plasma were both S- and N-oxidized metabolites in rats and only N-oxidized metabolite in dogs, indicating that a large species difference was obsd. in the metab. of SNI-2011. Sex difference was also obsd. in the pharmacokinetics of SNI-2011 in rats, but not in dogs. In the in vitro study, chem. inhibition and pH-dependent studies revealed that the sulfoxidn. and N-oxidn. of SNI-2011 were mediated by cytochrome P 450 (CYP) and flavin-contg. monooxygenase (FMO), resp., in both species. In addn., CYP2D and CYP3A were mainly responsible for the sulfoxidn. in rat liver microsomes.



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