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DATASHEET

Zatebradine hydrochloride

Product overview

Name	Zatebradine hydrochloride
Cat No	HB1151
Alternative names	UL-FS 49
Biological action	Blocker
Purity	>95%
Description	HCN channel blocker. Potent, selective bradycardic agent.

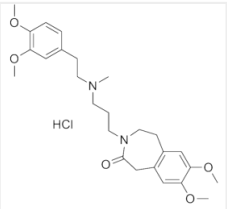
Biological Data

Biological description	Hyperpolarization-activated, cyclic nucleotide-gated cation (HCN) channel blocker (IC_{50} = 1.96 µM). Potent and selective bradycardic agent that acts at sinoatrial node. Also blocks voltage-gated outward K^+ currents (IK) and hyperpolarization-activated inward currents (I(f)). Exhibits little or no activity for L-type Ca^{2+} currents (ICa). Displays antiarrythmic properties.

Solubility & Handling

Storage instructions	+4°C (desiccate)
Solubility overview	Soluble in water (100mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name	3-[3-[[2-(3,4-Dimethoxyphenyl)ethyl]methylamino]propyl]-1,3,4,5-tetrahydro-7,8-dimethoxy-2*H*-3-benzazepin-2-one hydrochloride
Molecular Weight	493.04
Chemical structure	
Molecular Formula	$C_{26}H_{36}N_2O_5$.HCl
CAS Number	91940-87-3
PubChem identifier	3045335
SMILES	Cl.COC1=CC=C(CCN(C)CCCN2CCC3=C(CC2=O)C=C(OC)C(OC)=C3)C=C1OC
InChi	InChI=1S/C26H36N2O5.ClH/c1-27(13-9-19-7-8-22(30-2)23(15-19)31-3)11-6-12-28-14-10-20-16-24(32-4)25(33-5)17-21(20)18-26(28)29;/h7-8,15-17H,6,9-14,18H2,1-5H3;1H
InChiKey	ZRNKXJHEQKMWCH-UHFFFAOYSA-N
MDL number	MFCD06798356

References

Multiple inhibitory effects of zatebradine (UL-FS 49) on the electrophysiological properties of retinal rod photoreceptors.

Satoh TO *et al* (2002) Pflugers Arch 443(4)
PubMedID 11907819

Acute effects of zatebradine on cardiac conduction and repolarization.

Sen L *et al* (2002) J Cardiovasc Pharmacol Ther 7(1)
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Three different bradycardic agents, zatebradine, diltiazem and propranolol, distinctly modify heart rate variability and QT-interval variability.

Yamabe M *et al* (2007) Pharmacology 80(4)
PubMedID 17690562

Bradycardic and proarrhythmic properties of sinus node inhibitors.

Stieber J *et al* (2006) Mol Pharmacol 69(4)
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