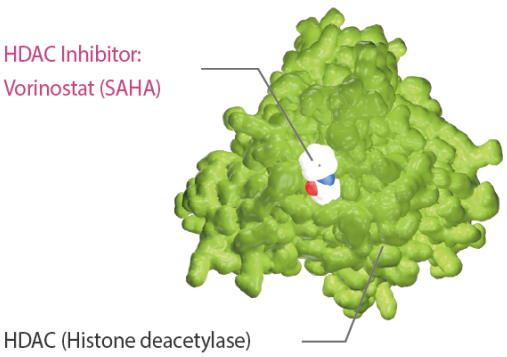
HCN Channel

Hyperpolarization activated cyclic nucleotide gated channels



Hyperpolarization- and Cyclic Nucleotide-gated (HCN) channels are a family of six transmembrane domain, single pore-loop, hyperpolarization activated, non-selective cation channels. The HCN family consists of four members (HCN1-4). HCN channels represent the molecular correlates of I(h), a hyperpolarization-activated current best known for its role in controlling heart rate and in the regulation of neuronal resting membrane potential and excitability.

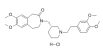
HCN channels are unique among vertebrate voltage-gated ion channels, in that they have a reverse voltage-dependence that leads to activation upon hyperpolarization. HCN channels are encoded by four genes (HCN1-4) and are widely expressed throughout the heart and the central nervous system.

HCN Channel Inhibitors & Modulators

Cilobradine hydrochloride

(DK-AH 269) Cat. No.: HY-18940A

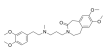
Bioactivity: Cilobradine is an HCN Channel blocker; an open channel blocker of neuronal Ih and related cardiac If channels. Target: HCN Channel blocker Cilobradine is a HCN channel blocker that is about 3 times more potent than ZD7288. At a concentration of 10 μM, Cilobradine inhibits WT mHCN2 channel current by 86 ±...
Purity: >98%
Clinical Data: Phase 1
Size: 2 mg



Zatebradine

(UL-FS-49 (free base); UL-FS-49CL (free base)) Cat. No.: HY-13422A

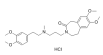
Bioactivity: Zatebradine(UL-FS-49 free base; UL-FS-49CL free base) is a potent HCN channels antagonist, which decreased the heartbeat in a reversible manner; 92% inhibition of the hHCN1-mediated current at 10 uM. IC50 value: 10 uM(92% 92% inhibition of the hHCN1) [1] Target: hHCN channel antagonist The pharmacological...
Purity: 98.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



Zatebradine hydrochloride

(UL-FS-49; UL-FS-49CL) Cat. No.: HY-13422

Bioactivity: Zatebradine hydrochloride (UL-FS-49; UL-FS-49CL) is a potent HCN channels antagonist, which decreased the heartbeat in a reversible manner; 92% inhibition of the hHCN1-mediated current at 10 uM. IC50 value: 10 uM(92% 92% inhibition of the hHCN1) [1] Target: hHCN channel antagonist The pharmacological...
Purity: 99.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 50 mg



ZD7288

(ICI D7288) Cat. No.: HY-101346

Bioactivity: ZD7288 is a selective hyperpolarization-activated cyclic nucleotide-gated (**HCN**) channel blocker.

Purity: 99.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 mg, 10 mg