PrecisION® hCav3.2 Recombinant Stable Cell Line

Catalog Number CYL3075 **Lot Number** See Vial

Contents 2 Vials, 2 x 10^6 to 4 x 10^6 in 1 mL

Background Information

The T-type calcium channel (hCav3.2) is a type of voltage-dependent calcium channel, the α1 subunit determines most of the channel's properties. The T-type calcium channel is one of the components that produce the pacemaker potential in the SA node of the heart. T-type calcium channel blockers are used primarily as antiepileptics. Additional information can be found on page 2.

Product Information

Description Recombinant HEK 293 cell line expressing the human T-type calcium channel Cav3.2

Family Calcium, Voltage-Gated

Target Cav3.2

	Target Protein	Accession Number
1	Cav3.2	NM_021098
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A

Species Human

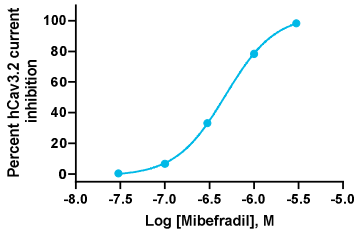
Host Cell Type HEK 293

Application Electrophysiology assay (conventional and automated patch clamp platforms)

Storage Vials are to be stored in vapor phase of liquid nitrogen

Functional Performance

HEK293 cells expressing hCav3.2 were characterized in terms of their pharmacological and biophysical properties using whole-cell patch clamp techniques.



Electrophysiology Method QPatch

Reference Agonist

Reference Antagonist Mibefradil

Antagonist IC_{50} (μM) 4.80

Passage Stability

This cell line has been confirmed to be stable through at least 12 passages with no significant drop in assay window or change in pharmacology.

Mycoplasma Testing

This lot was tested and found to be free of mycoplasma contamination. Data available upon request.

Notes

Additional functional (pharmacological and electrophysiological) validation on multiple platforms is available upon request.

Additional Ligand Information

Control Compound	Mibefradil
Vendor Name :	Tocris
Vendor Catalog No.	2198

Additional Background Information

Two voltage-dependent calcium channels play critical roles in the physiology of cardiac muscle: L-type calcium channel ('L' for Long-lasting) and T-type calcium channels ('T' for Transient) voltage-gated calcium channels. L-type channels are important in sustaining an action potential, while T-type channels are important in initiating them.

Ordering: +1.510.979.1415 option 4 or e-mail CustomerServiceDRX@eurofins.com
Technical support: +1.510.979.1415 option 5 or e-mail DRX_SupportUS@eurofinsUS.com
General product information: www.discoverx.com

Limited Use License Agreement