

PrecisION[®] hKv2.1/hKv9.2 Recombinant Stable Cell Line

Catalog Number CYL3067

Lot Number

See Vial

Contents 2 Vials, 2 x 10⁶ to 4 x 10⁶ in 1 mL

Background Information

Kv2.1 is mostly expressed in the hippocampus and cortex in pyramidal neurons in the brain. It is a delayed rectifier K⁺ current that contributes to excitability, action potential duration and tonic spiking. Kv9.2 is found in excitable and non-excitable cells. These two channels are often combined and help regulate each other's kinetics via the alpha subunits. Both are in the Shab-related subfamily of potassium channels.

Product Information

Description Recombinant CHO-K1 cell line co-expressing the human Kv2.1 (voltage-gated potassium channel, Shab-related subfamily, member 1, KCNB1) and the human Kv9.2 (voltage-gated, delayed rectifier potassium channel)

Family Potassium, Voltage-Gated

Target Kv2.1/Kv9.2

	Target Protein	Accession Number
1	Kv2.1	NM_004975
2	Kv9.2	NM_020697
3	N/A	N/A
4	N/A	N/A

Species Human

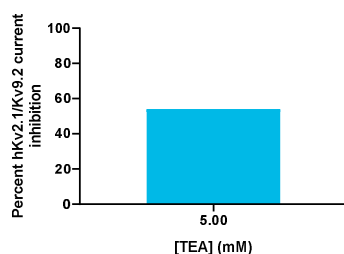
Host Cell Type CHO-K1

Application Electrophysiology assay (conventional and automated patch clamp platforms)

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

Functional Performance

CHO cells expressing hKv2.1/hKv9.2 were characterized in terms of their pharmacological and biophysical properties using whole-cell patch clamp techniques.



Electrophysiology Method MPC

Reference Agonist

Reference Antagonist TEA

Antagonist IC₅₀ (μM)

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 TEA

Vendor Name : Sigma-Aldrich

Vendor Catalog No. T2265

Additional Background Information

N/A

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