

PrecisION[®] hKv4.2/hKChIP2 Recombinant Stable Cell Line

Catalog Number CYL3026

Lot Number

See Vial

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

Background Information

hKv4.2/KChIP2 is a rapidly inactivating voltage sensitive potassium channel found both in neurons (A-current) and cardiac myocytes (I_{to}) where they are responsible for the early phase of cardiac action potential repolarization. Due to their critical role in controlling the trajectory of the action potential to differing degrees in various regions of the heart, blockade of this channel could lead to increased arrhythmic risk.

Product Information

Description Recombinant CHO-K1 cell line co-expressing the human Kv4.2 (voltage-gated potassium channel) and the human Kv channel interacting protein, KChIP2

Family Potassium, Voltage-Gated

Target Kv4.2/KChIP2

	Target Protein	Accession Number
1	Kv4.2	NM_012281
2	KChIP2	AF199598
3	N/A	N/A
4	N/A	N/A

Species Human

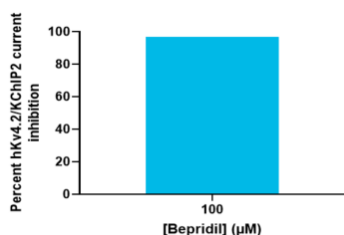
Host Cell Type CHO-K1

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 hKv4.2/hKChIP2 were characterized in terms of their pharmacological and biophysical properties using whole-cell patch clamp techniques.



Electrophysiology Method MPC

Reference Agonist

Reference Antagonist Bepridil

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 Bepiridil

Vendor Name : Sigma-Aldrich

Vendor Catalog No. B5016

Additional Background Information

N/A

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