

## PrecisION<sup>®</sup> hKv2.1 Recombinant Stable Cell Line

**Catalog Number** CYL3022

**Lot Number**

See Vial

**Contents** 2 Vials, 2 x 10<sup>6</sup> to 4 x 10<sup>6</sup> in 1 mL

### Background Information

Kv2.1 is expressed in the brain (cell bodies and dendrites of neurons but not axons, as well as Schwann cells), atria, ventricle, skeletal muscle, cochlea, retina, lung and pulmonary arteries. It is involved in maintaining membrane potential and modulating electrical excitability of both neurons and muscle cells. It is thought that Kv2.1 has a role in the muscle tone of the pulmonary system, as the expression Kv2.1 in pulmonary smooth muscle has been found to be reduced in chronic hypoxic pulmonary hypertension.

### Product Information

**Description** Recombinant CHO-K1 cell line expressing the human voltage-gated potassium channel Kv2.1

**Family** Potassium, Voltage-Gated

**Target** Kv2.1

|   | Target Protein | Accession Number |
|---|----------------|------------------|
| 1 | Kv2.1          | NM_004975        |
| 2 | N/A            | N/A              |
| 3 | N/A            | N/A              |
| 4 | N/A            | N/A              |

**Species** Human

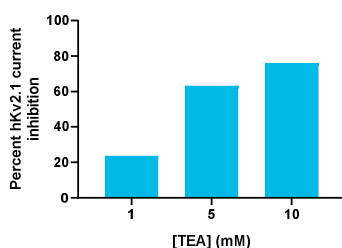
**Host Cell Type** CHO-K1

**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 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 IC<sub>50</sub> (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

**Ordering:** +1.510.979.1415 option 4 or e-mail [CustomerServiceDRX@eurofins.com](mailto:CustomerServiceDRX@eurofins.com)

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