

## PrecisION<sup>®</sup> hnAChR $\alpha$ 4/ $\beta$ 2 Recombinant Stable Cell Line

**Catalog Number** CYL3106

**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

The hnAChR $\alpha$ 4 $\beta$ 2 nicotinic receptor is located in multiple regions of the brain including the prefrontal cortex, Hippocampus, NAc, Amygdala, and VTA. It is involved in synaptic plasticity pertaining to attention, learning, memory, cognition, and development. This target's high binding affinity for nicotine is the cause for its highly addictive properties.

### Product Information

**Description** Recombinant HEK 293 cell line expressing the  $\alpha$ 4 (accession number NM\_000744.6) and  $\beta$ 2 subunits of the human nicotinic acetylcholine receptor.

**Family** Ligand-Gated

**Target** nAChR  $\alpha$ 4/ $\beta$ 2

	Target Protein	Accession Number
1	nAChR $\alpha$ 4	NM_000744.6
2	nAChR $\beta$ 2	NM_000748.2
3	N/A	N/A
4	N/A	N/A

**Species** Human

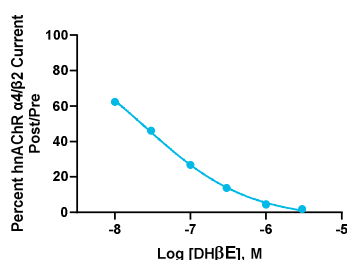
**Host Cell Type** HEK 293

**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 hnAChR  $\alpha$ 4/ $\beta$ 2 were characterized in terms of their pharmacological and biophysical properties using whole-cell patch clamp techniques.



**Electrophysiology Method** IonFlux

**Reference Agonist** Acetylcholine

**Reference Antagonist** DH $\beta$ E

**Antagonist IC<sub>50</sub> ( $\mu$ M)** 0.03

### 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** DH $\beta$ E

**Vendor Name :** Tocris

**Vendor Catalog No.** 2349

### 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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