

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT $\alpha$ 2B RECEPTOR

### PRODUCT INFORMATION

**Catalog Number:** CG1435-1

**Lot Number:** CG1435-1-021422

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Cellbanker 2  
(Amsbio)

**Host cell:** CHO-K1 Gqj5

**Transfection:** Expression vector containing full-length human ADRA2B cDNA (GenBank Accession Number NM\_000682.5) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

**Propagation Medium:** DMEM/F12, 10% FBS, 10  $\mu$ g/mL puromycin, 250  $\mu$ g/mL hygromycin

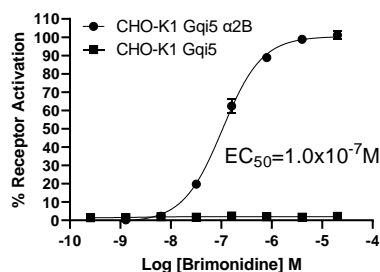
**Stability:** Stable for a minimum of 2 months in continuous culture

### Data sheet

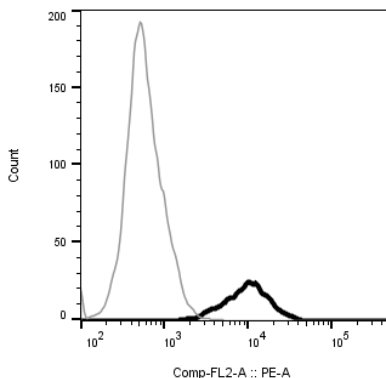
**Background:** Adrenergic  $\alpha$ 2b receptor belongs to the group of nine adrenoceptors that mediate the biological actions of the endogenous catecholamines adrenaline and noradrenaline. While  $\alpha$ 2a receptor exerts a tonic sympathoinhibitory function, the  $\alpha$ 2b is responsible for the central hypertensive sympathoexcitatory response. Development of agents capable of selectively activating the  $\alpha$ 2a or blocking the  $\alpha$ 2b may further improve our capability to treat hypertension, ischemic heart disease and heart failure. The  $\alpha$ 2b receptor also contributes to the peripheral regulation of vascular tone.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Black line: parental cells; gray line: receptor-expressing cells.

### References:

Knaus et al (2007) Alpha2-adrenoceptor subtypes--unexpected functions for receptors and ligands derived from gene-targeted mouse models. *Neurochem Int* 51:277-281.

Philipp et al. (2002) Physiological significance of alpha(2)-adrenergic receptor subtype diversity: one receptor is not enough. *Am J Physiol Regul Integr Comp Physiol*. 283:R287-R295.

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