

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT α 2A RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CG1434-1

Lot Number: CG1434-1-021422

Quantity: 1 vial (2×10^6) frozen cells

Freeze Medium: Cellbanker 2
(Amsbio)

Host cell: CHO-K1 Gqj5

Transfection: Expression vector containing full-length human ADRA2A cDNA (GenBank accession Number NM_000681.2) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 10 μ g/mL puromycin, 250 μ g/mL hygromycin

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

Background: Adrenergic α 2a receptor belongs to the group of nine adrenoceptors that mediate the biological actions of adrenaline and noradrenaline. The α 2a receptor is expressed in the brain, spleen, kidney, heart and gastrointestinal tract. It is centrally predominant and exerts a tonic sympathoinhibitory function, whereas peripherally it has a vasoconstrictive effect. The α 2a receptor is also involved in sedation, digestive functions and analgesia.

Application: Functional assays

Figure 1

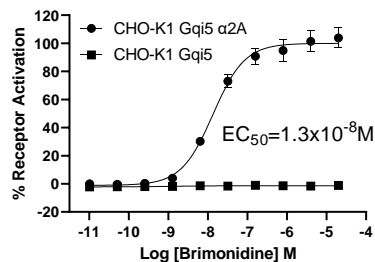


Figure 2

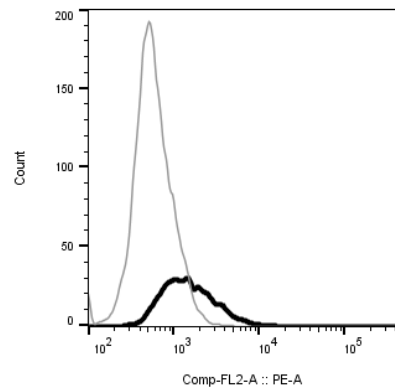


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Black line: parental cells; gray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