

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT α 2C RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CG1436-1

Lot Number: CG1436-1-021522

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 ADRA2C cDNA (GenBank Accession Number AY455666) 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: The human adrenergic α 2c receptor is a 458-amino acid, 7-transmembrane protein. It belongs to the group of nine adrenoceptors that mediate the biological actions of the endogenous catecholamines adrenaline and noradrenaline. All three alpha2-receptor subtypes may operate as presynaptic inhibitory feedback receptors to control the release of neurotransmitters. The α 2c receptor is of particular importance as it appears to regulate venous vasoconstriction.

Application: Functional assays

Figure 1

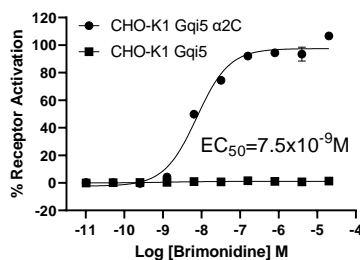


Figure 2

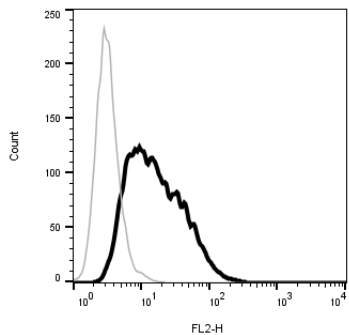


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

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:

Gyires et al. (2009) alpha(2)-Adrenoceptor subtypes-mediated physiological, pharmacological actions. *Neurochem Int* 55:447-453.

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

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