

MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT α 2C RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1436-1

Lot Number: C1436-1-101209

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

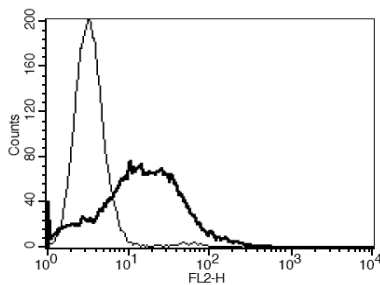
Transfection: Expression vector containing full-length human ADRA2C cDNA (GenBank Accession Number AY455666) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable in culture for minimum of two months

Figure 3



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

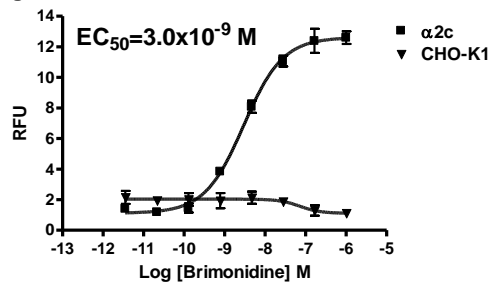


Figure 2

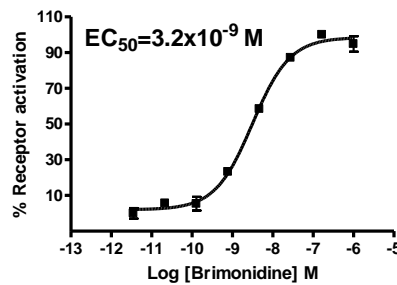


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 3.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick 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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