

MULTISCREEN™ DIVISION ARRESTED CELL LINE
HUMAN RECOMBINANT α 2A RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1434-1a

Lot Number: DC1434-1a-091223

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Cell Banker 2

Host cell: CHO-K1

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

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

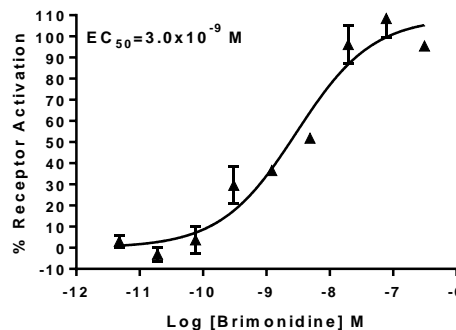


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01).

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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