

MULTISCREEN MEMBRANE PREPARATION HUMAN RECOMBINANT α 2A RECEPTOR

PRODUCT INFORMATION

Catalog Number: MC1434-1a

Lot Number: MC1434-1a-06192012

Quantity: 1 vial (15.6 mg/ml)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human α2a cDNA (GenBank Accession Number: NM_000681) with FLAG tag sequence

at N-terminus

Recommended Storage: Liquid

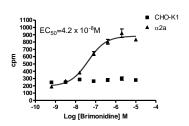
nitrogen

Data sheet

Background: Adrenergic $\alpha 2a$ receptor belongs to the group of nine adrenoceptors that mediate the biological actions of adrenaline and noradrenaline. The $\alpha 2a$ 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 $\alpha 2a$ receptor is also involved in sedation, digestive functions and analgesia.

Application: [35S]GTPγS Binding Assay

Figure 1



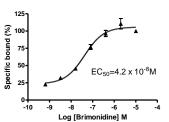


Figure 2

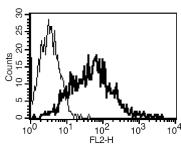


Figure 1. Dose-dependent [35 S]GTPγS Binding to α2a membrane upon treatment with agonist using homogenous proximity assay method. **Figure 2**. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

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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