

## MULTISCREEN™ $\beta$ -ARRESTIN2 STABLE CELL LINE HUMAN RECOMBINANT $\beta$ 2 ADRENERGIC RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** CA1438BA2

**Lot Number:** CA1438BA2-090221

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** CellBanker 2 (Amsbio 11891)

**Host cell:** HEK293T  $\beta$ -Arrestin2

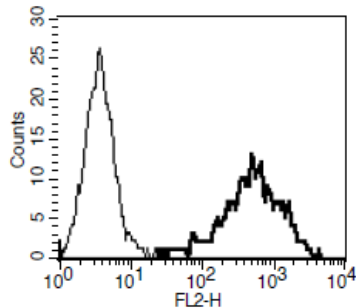
**Transfection:** Expression vector containing full-length human ADRB2 cDNA (GenBank Accession Number NM\_000024) with FLAG tag sequence at N-terminus and ARR2 cDNA (GenBank Accession Number NM\_004313.3)

**Recommended Storage:** Liquid nitrogen upon receiving

**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin, 50  $\mu$ g/mL hygromycin

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

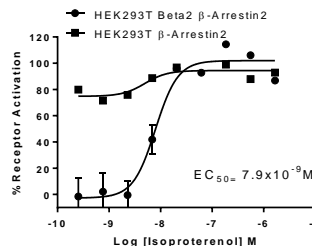
**Figure 3**



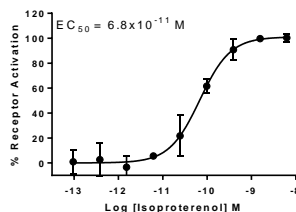
**Background:** Norepinephrine is implicated in a wide range of physiological processes through activation of nine different G-protein-coupled receptors ( $\alpha$ 1a,  $\alpha$ 1b,  $\alpha$ 1d,  $\alpha$ 2a,  $\alpha$ 2b,  $\alpha$ 2c,  $\beta$ 1,  $\beta$ 2,  $\beta$ 3). The human  $\beta$ 2-adrenergic receptor was the first 7-transmembrane receptor for a hormone or neurotransmitter to have its crystal structure solved. It has been suggested that the  $\beta$ 2-adrenoceptor may form homodimers as well as oligomers with other receptors. The  $\beta$ 2-adrenoceptor mediates the actions of catecholamines in multiple tissues. They are responsible for relaxation of vascular, uterine, and airway smooth muscle, and are involved in metabolic and endocrine functions.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent stimulation from arrestin recruitment upon treatment with ligand, measured with MULTISCREEN™  $\beta$ -Arrestin Assay Kit (Multispan MSBA01). **Figure 2.** Dose-dependent stimulation of 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:

Kobilka *et al.* (1987) cDNA for the human beta 2-adrenergic receptor: a protein with multiple membrane-spanning domains and encoded by a gene whose chromosomal location is shared with that of the receptor for platelet-derived growth factor. *Proc Natl Acad Sci USA* 84:46-50.

Frielle *et al.* (1989) Properties of the beta 1- and beta 2-adrenergic receptor subtypes revealed by molecular cloning. *Clin Chem* 35:721-725.

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