

MULTISCREEN™ β -ARRESTIN2 STABLE CELL LINE HUMAN RECOMBINANT AT1 RECEPTOR

PRODUCT INFORMATION

Catalog Number: HA1417-BA2

Lot Number: HA1417-BA2-073021

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

Freeze Medium: CellBanker2

Host cell: HEK293T

Transfection: Expression vector containing full-length human AGTR1 cDNA (same as GenBank Accession Number NM_000685.4 except for one silent mutation) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 1 μ g/mL puromycin, 50 μ g/mL hygromycin

Stability: In progress

Data sheet

Background: AT1 (Angiotensin II, type 1) receptor is an angiotensin receptor with vasopressor effects and regulates aldosterone secretion. It is essential in controlling blood pressure and volume in the cardiovascular system. AT1 receptor antagonists are drugs useful in the treatment of hypertension, diabetic nephropathy and congestive heart failure. Blockade of AT1 receptors could also be a novel approach in the treatment of mood disorders and neurodegenerative diseases of the brain.

Application: Functional assays

Figure 1

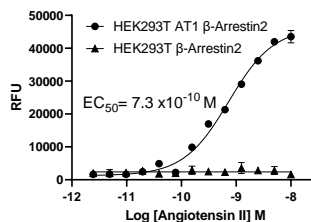


Figure 2

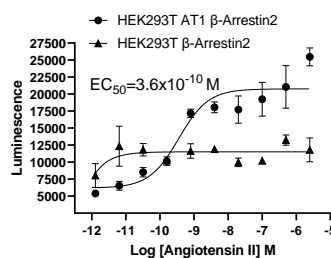


Figure 3

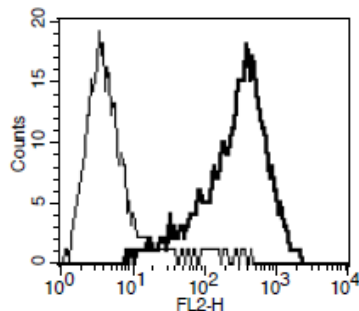


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent stimulation from arrestin recruitment upon treatment with ligand, measured with MultiScreen™ β -Arrestin Assay Kit (Multispan MSBA01). **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:

Bergsma *et al.* (1992) Cloning and characterization of a human angiotensin II type 1 receptor. *Biochem Biophys Res Commun* 183:989-995.

Jagadeesh (1998) Angiotensin II receptors-antagonists, molecular biology, and signal transduction. *Indian J Exp Biol* 36:1171-1194.

Saavedra *et al.* (1998) Blockade of brain angiotensin II AT1 receptors ameliorates stress, anxiety, brain inflammation and ischemia: Therapeutic implications. *Psychoneuroendocrinology* 36:1-18.

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