

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT 5-HT1A RECEPTOR

PRODUCT INFORMATION

Catalog Number: CG1319

Lot Number: CG1319-021622

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

Freeze Medium: Cellbanker 2
(Amsbio)

Host cell: HEK293T Gqi5

Transfection: Expression vector containing full-length human HTR1A cDNA (GenBank accession number NM_000524.2) with FLAG tag sequence at N-terminus

Propagation Medium: DMEM, 10% FBS, 10 µg/mL puromycin, 50 µg/mL hygromycin

Recommended Storage: Liquid nitrogen upon receiving

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

Data sheet

Background: The human serotonin receptor 5-HT1A is a G protein-coupled receptor. 5-HT1A receptors can be found mainly in the cerebral cortex, hippocampus, septum, amygdala, and raphe nucleus, with lesser amounts in the basal ganglia and thalamus. 5-HT1A ligands may prove to be therapeutic in the treatment of various disorders such as depression, anxiety, and schizophrenia.

Application: Functional assays

Figure 1

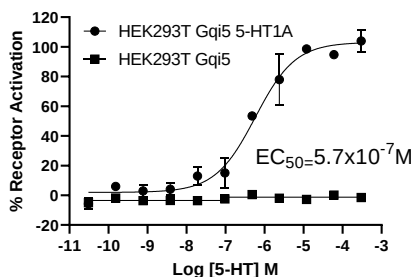


Figure 2

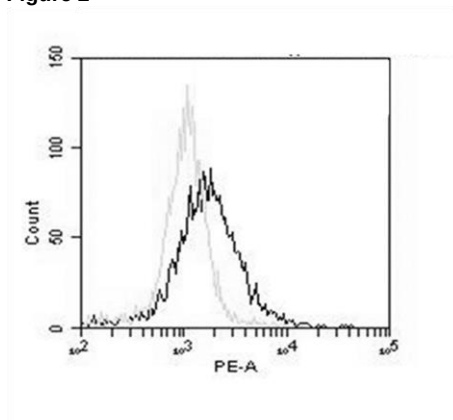


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

Figure 2. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Black line: parental cells; gray line: receptor-expressing cells.

References:

- Hamon et al. (1990) The main features of central 5-HT1 receptors. *Neuropsychopharmacology* 3:349-360.
- Savitz et al. (2009) 5-HT(1A) receptor function in major depressive disorder. *Prog Neurobiol* 88:17-31.
- Stam et al. (1992) Genomic organization, coding sequence and functional expression of human 5-HT2 and 5-HT1A receptor genes. *Eur J Pharmacol* 227:153-162.

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