

**MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT 5-HT1A RECEPTOR**

Data sheet

PRODUCT INFORMATION

Catalog Number: C1319a

Lot Number: C1319a-111014

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

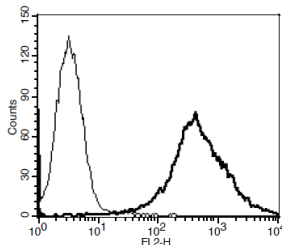
Transfection: Expression vector containing full-length human HTR1A cDNA (GenBank accession number NM_000524.2) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: In progress

Figure 3



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

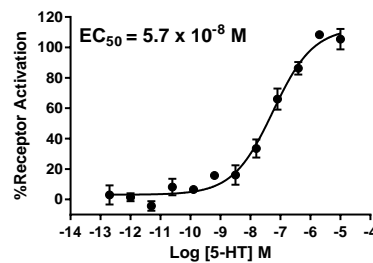


Figure 2

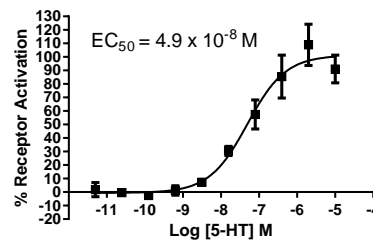


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Dose-dependent stimulation of pERK level upon treatment with ligand, monitored with FlexStation. **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:

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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