

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT 5-HT1B RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1320

Lot Number: C1320-042110

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 HTR1B cDNA (GenBank accession number NM_000863.1) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable in culture for minimum of two months

Background: The human serotonin receptor 5-HT1B is a G protein-coupled receptor. 5-HT1B receptors are present in many parts of the central nervous system, but most notably, can be found in the basal ganglia, striatum, and frontal cortex. 5-HT1B receptors inhibit the release of many neurotransmitters, such as serotonin, GABA, acetylcholine, and glutamate. 5-HT1B ligands may prove to be therapeutic in the treatment of various disorders such as depression, anxiety, and aggression.

Application: Functional assays

Figure 1

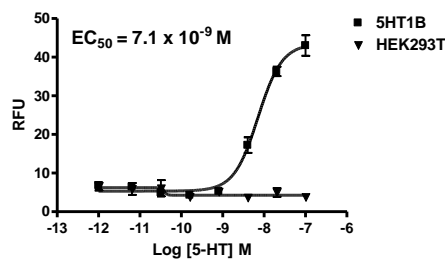


Figure 2

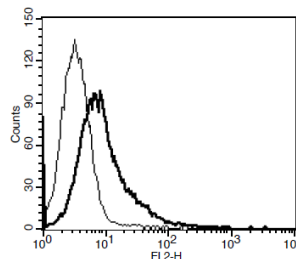


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Hamblin *et al.* (1992) Molecular cloning and functional characterization of a human 5-HT1B serotonin receptor: a homologue of the rat 5-HT1B receptor with 5-HT1D-like pharmacological specificity. *Biochem Biophys Res Commun*, 184:752-759.

Hamon *et al.* (1990) The main features of central 5-HT1 receptors. *Neuropsychopharmacology* 3:349-360.

Ruf *et al.* (2009) The 5-HT(1B) receptor: a novel target for the pathophysiology of depression. *Curr Drug Targets* 10:1118-1138.

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