

MULTISCREEN™ STABLE CELL LINE
DOG RECOMBINANT 5-HT2A RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: Cd1324

Lot Number: Cd1324-062912

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Full-length Dog HTR2A cDNA (GenBank Accession Number NM_001005869.1) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: In progress

Background: 5-HT2A (5-hydroxytryptamine receptor 2A) is a receptor for serotonin. It is expressed throughout the central nervous system in the neocortex and olfactory tubercle. Additionally, it is expressed in platelets, fibroblasts and neurons of the peripheral nervous system. 5-HT2A receptor agonists may have important clinical value in the treatment of various disorders, such as depression, anxiety, bipolar disorder and schizophrenia. It is also a receptor for the human polyomavirus, JC virus.

Application: Functional assays

Figure 1

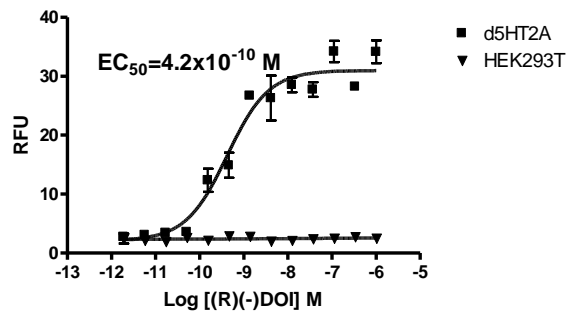


Figure 2

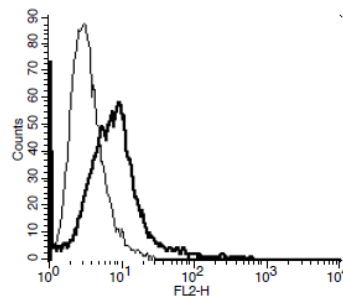


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick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

References:

Bonaventure *et al.* (2005) Molecular and pharmacological characterization of serotonin 5-HT2A and 5-HT2B receptor subtypes in dog. *Eur J Pharmacol* 513(3):181-92.

Meltzer and Li (2003) Serotonin receptors: their key role in drugs to treat schizophrenia. *Prog Neuropsychopharmacol Biol Psychiatry* 27:1159-1172.

Stam *et al.* (1992) Genomic organization, coding sequence and functional expression of human 5-HT2 and HT1A receptor genes. *Eur J Pharmacol* 227:158-162.

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