

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT 5-HT_{2A} RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1324

Lot Number: C1324-122024

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Cellbanker 2

Host cell: HEK293T

Transfection: Full-length Human HTR2A cDNA (GenBank Accession Number NM_000621) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

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

Background: 5-HT_{2A} (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-HT_{2A} 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

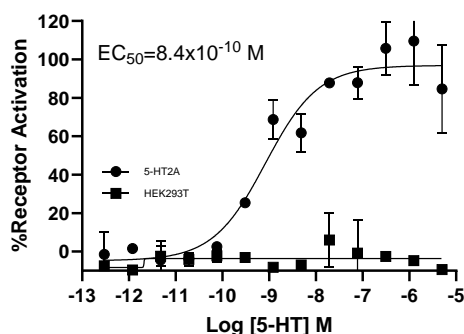


Figure 2

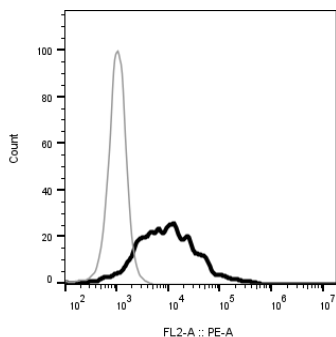


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick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

References:

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

Porter *et al.* (1999) Functional characterization of agonists at recombinant human 5-HT_{2A}, 5-HT_{2B}, and 5-HT_{2C} receptors in CHO-K1 cells. *Br J Pharmacol* 128:13-20.

Stam *et al.* (1992) Genomic organization, coding sequence and functional expression of human 5-HT₂ and HT_{1A} receptor genes. *Eur J Pharmacol* 227:158-162.

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