

**MULTISCREEN™ STABLE CELL LINE**  
**HUMAN RECOMBINANT 5-HT<sub>2A</sub> RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** Cm1324

**Lot Number:** Cm1324-081412

**Quantity:** 1 vial (2 x 10<sup>6</sup>) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T

**Transfection:** Full-length Mouse HTR<sub>2A</sub> cDNA (GenBank Accession Number NM\_172812) with FLAG-tag sequence at the N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

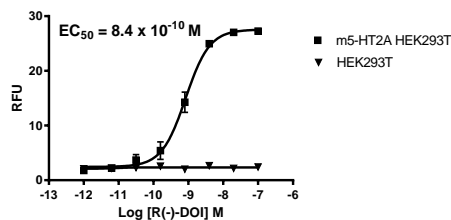
**Propagation Medium:** DMEM, 10% FBS, 1 µg/mL puromycin

**Stability:** In progress

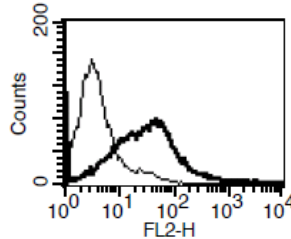
**Background:** 5-HT<sub>2A</sub> (5-hydroxytryptamine receptor 2A) is a receptor for serotonin. It is expressed throughout the central nervous system in the neocortex and olfactory tubercle. Additionally, it is expressed in platelets, fibroblasts and neurons of the peripheral nervous system. 5-HT<sub>2A</sub> 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<sub>2A</sub>, 5-HT<sub>2B</sub>, and 5-HT<sub>2C</sub> 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-HT<sub>2</sub> and HT<sub>1A</sub> receptor genes. *Eur J Pharmacol* 227:158-162.

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