

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

Data sheet

PRODUCT INFORMATION

Catalog Number: CA1324BA2

Lot Number: CA1324BA2-100323

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: CellBanker2
(Amsbio 11891)

Host cell: HEK293T β-Arrestin2

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, 50 µg/mL
hygromycin

Stability: In progress

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

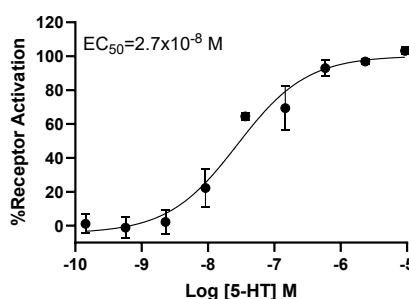


Figure 2

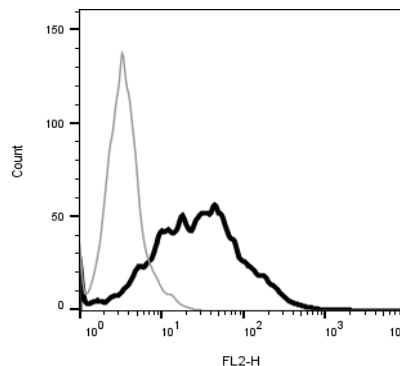


Figure 1. Dose-dependent stimulation from arrestin recruitment upon treatment with ligand, measured with MULTISCREEN™ β-Arrestin Assay Kit (Multispan MSBA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick 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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