

MULTISCREENTM STABLE CELL LINE HUMAN RECOMBINANT 5-HT2B RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1325-1

Lot Number: C1325-1-031709

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Sigma Freezing

Medium (C-6164)

Host cell: CHO-K1

Transfection: Full-length Human HTR2B cDNA (GenBank Accession Number NM_000867) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid

nitrogen upon receiving

 $\begin{array}{lll} \textbf{Propagation Medium:} \ DMEM/F12, \\ 10\% \ FBS, \ 10 \ \mu g/mL \ puromycin \end{array}$

Stability: Stable after minimum of two

months continuous growth

Data sheet

Background: 5-HT2B (5-hydroxytryptamine receptor 2B) is a receptor for serotonin. It is expressed in many peripheral and central nervous system tissues, including stomach fundus, liver kidney, muscle, intestine and brain. 5-HT2B receptors are responsible for many cardiovascular and central nervous system functions, such as blood vessel contraction, platelet shape changes, neuronal sensitization to tactile stimuli, and mediation of the hallucinogenic effects of phenylisopropylamin hallucinogens. It has also been shown to be required for heart development.

The cDNA expressed in the cell line has identical sequence to GenBank NM_000867 except for one base pair mutation that results in a change in amino acid at position 477 (from glutamic acid to glutamine). This has been reported as a natural variant.

Application: Functional assays

Figure 1

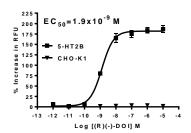


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Bonhaus *et al.* (1995) The pharmacology and distribution of human 5-hydroxytryptamine 2B (5-HT2B) receptor gene products: comparison with 5-HT2A and 5-HT2C receptors. *Br J Pharmacol* 115:622-628.

Nebegil et al. (1992) Serotonin 2B receptor is required for heart development. Proc Natl Acad Sci USA 97:9508-9513.

Porter *et al.* (1999) Functional characterization of agonists at recombinant human 5-HT2A, 5-HT2B, and 5-HT2C receptors in CHO-K1 cells. *Br J Pharmacol* 128:13-20.