

$\begin{array}{c} \mathbf{MULTISCREEN^{TM}\ DIVISION\text{-}ARRESTED\ CELL\ LINE} \\ \mathbf{HUMAN\ RECOMBINANT\ 5\text{-}HT7\ RECEPTOR} \end{array}$

PRODUCT INFORMATION

Catalog Number: DC1334 Lot Number: DC1334-053123

Quantity: 1 vial (4 x 106) frozen cells

Freeze Medium: Cellbanker 2

(Amsbio)

Host cell: HEK293T

Transfection: Expression vector containing full-length human HTR7 cDNA (GenBank accession number NM_019860.2) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid

nitrogen upon receiving

Propagation Medium: DMEM, 10%

FBS

Data sheet

Background: The 5-HT7 receptor is a member of the GPCR superfamily of cell surface receptors and is activated by the neurotransmitter serotonin. The 5-HT7 receptor is expressed in a variety of tissues, particularly in the brain, the gastrointestinal tract, and various blood vessels. The 5-HT7 receptor plays a role in smooth muscle relaxation within the vasculature and in the gastrointestinal tract, and is involved in thermoregulation, circadian rhythm, learning and memory, and sleep. This receptor is also involved in mood regulation, suggesting that it may be a useful target in the treatment of depression.

Application: Functional assays

Figure 1

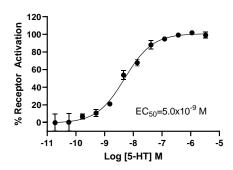


Figure 1. Dose-dependent stimulation of intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01)

References:

Bard *et al.* (1993) Cloning of a novel human serotonin receptor (5-HT7) positively linked to adenylate cyclase. *J Biol Chem* 268:23422-23426.

Lovenberg *et al.* (1993) A novel adenylyl cyclase-activating serotonin receptor (5-HT7) implicated in the regulation of mammalian circadian rhythms. *Neuron* 11:449-458.