

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT Y5 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1275a

**Lot Number:** C1275a-082510

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

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

**Host cell:** HEK293T

**Transfection:** Full-length Human NPY5R cDNA (GenBank Accession NM\_006174) with FLAG-tag sequence at the N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

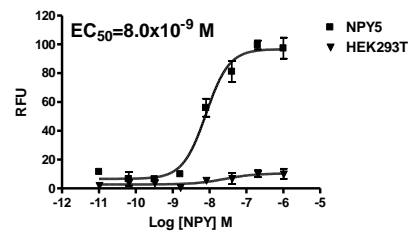
**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin

**Stability:** Stable in culture for minimum of two months

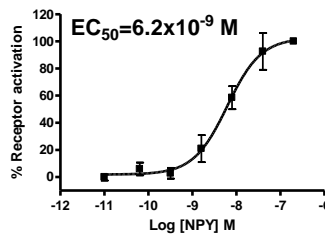
**Background:** NPY5R encodes 456-amino acid protein with 7 putative transmembrane domains. It has shown to be expressed in the brain and hypothalamus. Y5 receptors' pharmacological profile correlates it with peptides known to elicit a feeding response. It has been suggested to have effects on psychomotor activity, food intake, regulation of central endocrine secretion, and potent vasoactive effects on the cardiovascular system.

**Application:** Functional assays

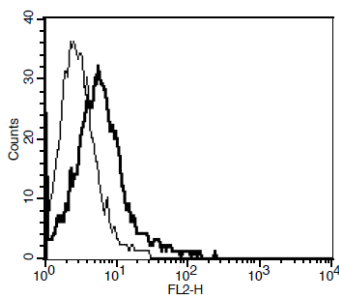
**Figure 1**



**Figure 2**



**Figure 3**



**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.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 3.** 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:**

Gerald *et al.* (1996) A receptor subtype involved in neuropeptide-Y induced food intake. *Nature* 382:168-171.

Hu *et al.* (1996) Identification of a novel hypothalamic neuropeptide Y receptor associated with feeding behavior. *J Biol Chem* 271:26315-26319.

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