

MULTISCREENTM STABLE CELL LINE HUMAN RECOMBINANT NPSR1 RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1355a

Lot Number: C1355a-080510

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human NPSR1 cDNA (GenBank accession number NM_207172.1) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable in culture for minimum of two months

Data sheet

Background: Neuropeptide S (NPS) receptor 1 is also known as GPR154 or G protein-coupled receptor for asthma susceptibility (GPRA). NPS receptor is widely expressed in the brain, with highest levels found in hypothalamus, amygdala, endopiriform nucleus, cortex, subiculum and nuclei of the thalamic midline. Central administration of NPS promotes behavioral arousal and suppresses all stages of sleep in rodents. Furthermore, NPS was found to produce anxiolytic-like effects in a battery of four different tests that measure behavioral responses of rodents to novelty or stress.

Application: Functional assays

Figure 1

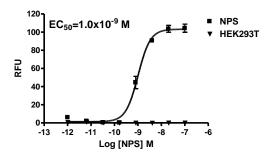


Figure 2

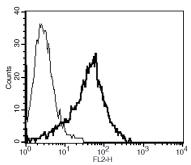


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen[™] Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). Figure 2. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Xu *et al.* (2004) Neuropeptide S: a neuropeptide promoting arousal and anxiolytic-like effects. *Neuron* 43:487-497.

Laitinen *et al.* (2004) Characterization of a common susceptibility locus for asthmarelated traits. *Science* 304:300-304.

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