

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT NMU2 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C1213

**Lot Number:** C1213-070111

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

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

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human NMUR2 cDNA (one sense mutation, which has been noted in literature, in comparison to GenBank Accession Number NM\_020167.3) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

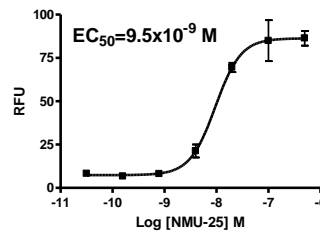
**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin

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

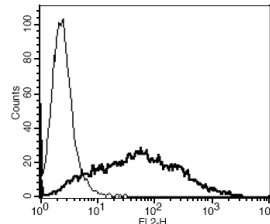
**Background:** NMUR2 is the second receptor for the neuromedin U, which is a neuropeptide and has been implicated in physiological roles, including the regulation of feeding, anxiety, pain, blood flow and smooth muscle contraction. NMUR2 is expressed predominantly in the central nervous system. Central administration of neuromedin U (NMU) suppresses food intake acting through the NMU-2 receptor (NMU2R), which is expressed in the hypothalamus.

**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:

Bhattacharyya *et al.* (2004) Studies of the neuromedin U-2 receptor gene in human obesity: evidence for the existence of two ancestral forms of the receptor. *J Endocrinol* 183:115-120.

Brighton *et al.* (2004) Signaling and ligand binding by recombinant neuromedin U receptors: evidence for dual coupling to Galphaq/11 and Galphai and an irreversible ligand-receptor interaction. *Mol Pharmacol* 66:1544-1556.

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