

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT NMU2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1213

Lot Number: C1213-070111

Quantity: 1 vial (2×10^6) 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 μ 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

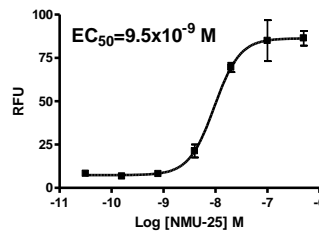


Figure 2

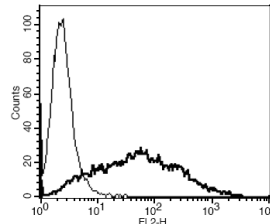


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick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