

MULTISCREEN™ STABLE CELL LINE
RAT RECOMBINANT NPBW1 RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1124-1

Lot Number: C1124-1-073005

Quantity: 1 vial (2×10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T Gaqi5

Transfection: Full-length rat Npbwr1 cDNA (GenBank Accession Number NM_001014784)

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 200 μ g/mL hygromycin, 0.625 μ g/mL puromycin

Stability: Stable after minimum of two months continuous growth

Data sheet

Background: Neuropeptide B/neuropeptide W receptor 1 (NPBW1 or GPR7) is a receptor for neuropeptides B and W, which may be involved in neuroendocrine system regulation, food intake and the organization of other signals. Targeted disruption of NPBW1 in mice has confirmed that this receptor plays a role in maintaining long-term energy homeostasis. NPBW1 lacking male mice show moderately severe, late-onset obesity that is a result of both hyperphagia and decreased energy expenditure with reduced locomotor activity.

Application: Functional assays

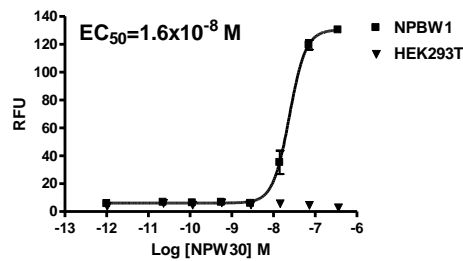


Figure legend: Dose-dependent calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Levine *et al.* (2005) Injection of neuropeptide W into paraventricular nucleus of hypothalamus increases food intake. *Am J Physiol Regul Integr Comp Physiol* 288:R1727-R1732.

Ishii *et al.* (2003) Targeted disruption of GPR7, the endogenous receptor for neuropeptides B and W, leads to metabolic defects and adult-onset obesity. *Proc Natl Acad Sci USA* 100: 0540-10545.

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