

**MULTISCREEN™ STABLE CELL LINE**  
**HUMAN RECOMBINANT NPBW1 RECEPTOR**

**PRODUCT INFORMATION**

**Catalog Number:** C1124

**Lot Number:** C1124-073005

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

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

**Host cell:** HEK293T Gaqi5

**Transfection:** Full-length human NPBWR1 cDNA (GenBank Accession Number NM\_005285)

**Recommended Storage:** Liquid nitrogen upon receiving

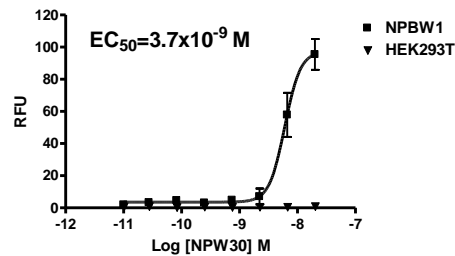
**Propagation Medium:** DMEM, 10% FBS, 200  $\mu$ g/mL hygromycin, 0.625  $\mu$ g/mL puromycin

**Stability:** Stable after minimum of 2 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 stimulation of 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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