

## MULTISCREEN™ MEMBRANE PREPARATION HUMAN RECOMBINANT NOP (OPRL1) RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** MC1354a

**Lot Number:** MC1354a-07202012

**Quantity:** 1 vial (8.9 mg/ml)

**Host cell:** HEK293T

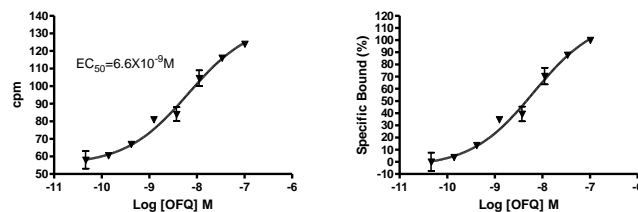
**Transfection:** Expression vector containing full-length human OPRL1 cDNA (GenBank Accession Number NM\_000913.3) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen

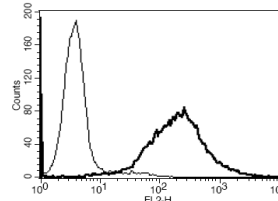
**Background:** NOP, ORL1 or OPRL1 (opioid receptor-like 1 receptor) is also known as nociceptin receptor, orphanin FQ receptor and KOR-3 (kappa 3-related opioid receptor). It is a receptor for the neuropeptide nociceptin/orphanin FQ and has a potential role in modulating a number of brain functions, including instinctive behaviors and emotions. In vivo experiments have demonstrated that nociceptin modulates a variety of biological functions including nociception, food intake, memory processes, cardiovascular and renal functions, spontaneous locomotor activity, gastrointestinal motility, anxiety and neurotransmitter release at peripheral and central sites.

**Application:** [<sup>35</sup>S] GTP<sub>γ</sub>S Binding Assay

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent [<sup>35</sup>S]GTP<sub>γ</sub>S Binding to NOP membrane upon treatment with agonist using homogenous proximity assay method. **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:

Calo *et al.* (2000) Pharmacology of nociceptin and its receptor: a novel therapeutic target. *Br J Pharmacol* 129:1261-1283.

Ciccocioppo *et al.* (2003) The nociceptin/orphanin FQ/NOP receptor system as a target for treatment of alcohol abuse: a review of recent work in alcoholpreferring rats. *Physiol Behav* 79:121-128.

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