

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT NOP (OPRL1) RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CG1354-1

Lot Number: CG1354-1-042814

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1 Gαq5

Transfection: Expression vector containing full-length human OPRL1 cDNA (GenBank Accession Number NM_000913.3)

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 10 µg/mL puromycin, 250 µg/mL hygromycin

Stability: Stable after minimum two months continuous growth

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: Functional assays

Figure 1

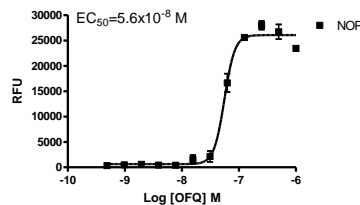


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

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.

FOR RESEARCH USE ONLY.

Multispan Inc. All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.