

## MULTISCREEN™ MEMBRANE PREPARATION HUMAN RECOMBINANT NPY2 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** MCG1274-1

**Lot Number:** MCG1274-1-052525

**Quantity:** 1 vial (12.76 mg/mL; in 1mg, 5mg, or 10 mg)

**Packaging Buffer:** 20 mM Gly-Gly, 1 mM MgCl<sub>2</sub>, 25 mM Sucrose (pH 7.2)

**Host cell:** CHO-K1 Gαq/5

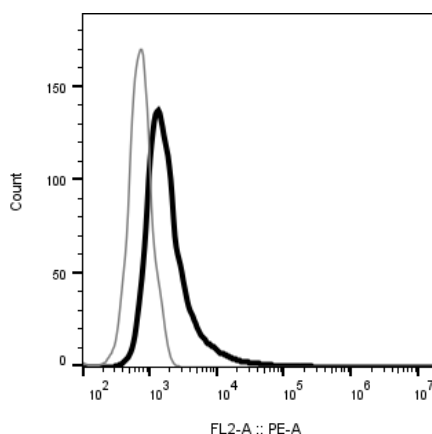
**Transfection:** Expression vector containing full-length human NPY2R cDNA (GenBank Accession Number NM\_00091) with FLAG tag sequence at N-terminus

**Recommended Storage:** -80°C upon receiving. Avoid repeated freeze-thaw.

**Background:** NPY2R (Y2) belongs to the family of G protein-coupled receptors. It is expressed at high levels in central nerve system, heart, ileum and colon. NPY2R shows high affinity for neuropeptide Y (NPY), peptide YY (PYY), and a fragment of NPY including amino acids 13 to 36. The rank order of affinity of this receptor for pancreatic polypeptides is PYY > NPY > PYY (3-36) > NPY (2-36) > [Ile-31, Gln-34] PP > [Leu-31, Pro-34] NPY > PP, [Pro-34] PYY and NPY free acid. NPY exhibits a variety of potent central and peripheral effects including those on feeding, memory, blood pressure, and intestinal secretions. NPY2R has been shown to contribute to obesity.

**Application:** Functional assays

**Figure 1**



**Figure 1.** 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:

Gerald *et al.* (1995) Expression cloning and pharmacological characterization of a human hippocampal neuropeptide Y/peptide YY Y2 receptor subtype. *J Biol Chem* 270:26758-26761.

Lutz *et al.* (1997) Neuropeptide Y receptor genes on human chromosome 4q31-q32 map to conserved linkage groups on mouse chromosomes 3 and 8. *Genomics* 41:498-500.

Rose *et al.* (1995) Cloning and functional expression of a cDNA encoding a human type 2 neuropeptide Y receptor. *J Biol Chem* 270:22661-22664.

**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.

26219 Eden Landing Road, Hayward, California 94545-3718 Phone: (510) 887-0817 info@multispaninc.com