

**MULTISCREEN™ MEMBRANE PREPARATION
HUMAN RECOMBINANT NPY4 RECEPTOR**

Data sheet

PRODUCT INFORMATION

Catalog Number: MC1300-1

Lot Number: MC1300-1-071417

Quantity: 1 vial (7.2mg/mL, 1mg)

Packaging Buffer: 20mM Gly-Gly, 1mM MgCl₂, 25mM Sucrose (pH 7.2)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human NPY4R cDNA (GenBank Accession Number AY268432) with FLAG tag sequence at N-terminus

Recommended Storage: Store at -80°C. Avoid repeated freeze-thaw.

Background: NPY4R (Y4) has been reported to be expressed at highest levels in brain, coronary artery and ileum. Low levels in pancreas and kidney. It is also been detected in colon and small intestine and isolated from human colon and head/neck libraries. It is one of the receptors for neuropeptide Y and peptide YY. The rank order of affinity of this receptor for pancreatic polypeptides is PP, PP (2-36) and [Ile-31, Gln-34] PP > [Pro-34] PYY > PYY and [Leu-31, Pro-34] NPY > NPY > PYY (3-36) and NPY (2-36) > PP (13-36) > PP (31-36) > NPY free acid. Ligand: Neuropeptide Y, Peptide YY.

Application: Functional assays

Figure 1

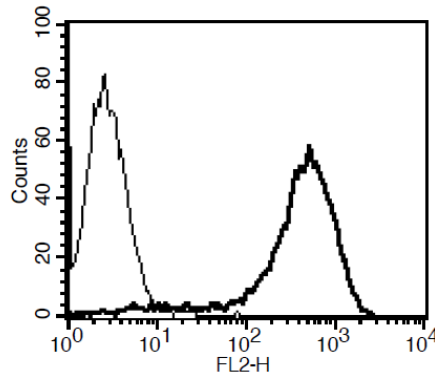


Figure 1. Dose-dependent stimulation of intercellular calcium flux upon treatment with ligand, monitored with FlexStation. Cells were transiently transfected with Gαq15. **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Bard *et al.* (1995) Cloning and functional expression of a human Y4 subtype receptor for pancreatic polypeptide, neuropeptide Y, and peptide YY. *J Biol Chem* 270:26762-26765.

Yan *et al.* (1996) Cloning and functional expression of cDNAs encoding human and rat pancreatic polypeptide receptors. *Proc Natl Acad Sci USA* 93:4661-4665.

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