

MULTISCREENTM MEMBRANE PREPARATION HUMAN RECOMBINANT NPY1 RECEPTOR

PRODUCT INFORMATION

Catalog Number: MCG1273-1

Lot Number: MCG1273-1-031317

Quantity: 1 vial (9.3mg/mL, 1mg)

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

Host cell: CHO-K1 Gaqi5

Transfection: Expression vector containing full-length human NPY1R cDNA (GenBank Accession Number NM_000909) with FLAG tag sequence at N-terminus

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

Data sheet

Background: NPY1R (Neuropeptide Y receptor type 1) is a receptor for neuropeptide Y that is the most abundant peptide present in the mammalian central and peripheral nervous system. Neuropeptide Y exhibits a variety of potent central and peripheral effects including those on feeding, memory, blood pressure, cardiac contractility and intestinal secretions. Neuropeptide Y effects are mediated by several different receptor subtypes, Y- 1, Y-1-like, Y-2, Y-3, Y-4 and Y-5. NPY1R is correlated with food feeding and subnanomolar antagonists of NPY1R have been discovered as potential anti-obesity agents. NPY1R is also involved in cardiovascular actions of exogenous neuropeptide Y and plays a role in maintaining basal blood pressure and heart rate in ischaemic heart failure.



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:

Balasubramaniam (1997) Neuropeptide Y family of hormones: receptor subtypes and antagonists. *Peptides* 18:445-457.

Hammond (2001) Neuropeptide Y receptor antagonists. IDrugs 4:920-927.

Zhao *et al.* (1999) Renal and cardiovascular role of the neuropeptide Y Y1 receptor in ischaemic heart failure rats. *J Pharm Pharmacol* 51:1257-1265.

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