

## PRODUCT INFORMATION

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| <b>Target</b>                           | NPY1R  |
| <b>Synonyms</b>                         | NPY1-R; NPYR   |
| <b>Description</b>                      | Human NPY1R full length protein-synthetic nanodisc   |
| <b>Delivery</b>                         | In Stock   |
| <b>Uniprot ID</b>                       | P25929   |
| <b>Expression Host</b>                  | HEK293   |
| <b>Protein Families</b>                 | Druggable Genome, GPCR, Transmembrane  |
| <b>Protein Pathways</b>                 | Neuroactive ligand-receptor interaction  |
| <b>Molecular Weight</b>                 | The human full length NPY1R protein has a MW of 44.4 kDa   |
| <b>Formulation &amp; Reconstitution</b> | Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Lyophilized from PBS. Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with pH lower than 6.5 in subsequent experiments. |
| <b>Storage &amp; Shipping</b>           | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.  |
| <b>Background</b>                       | The transmembrane protein mediates the function of neuropeptide Y (NPY), a neurotransmitter, and peptide YY (PYY), a gastrointestinal hormone. The encoded receptor undergoes fast agonist-induced internalization through clathrin-coated pits and is subsequently recycled back to the cell membrane. Activation of Y1 receptors may result in mobilization of intracellular calcium and inhibition of adenylate cyclase activity.                               |
| <b>Usage</b>                            | Research use only  |



### ELISA assay to evaluate NPY1R-Nanodisc 0.2 $\mu$ g Human NPY1R-Nanodisc per well

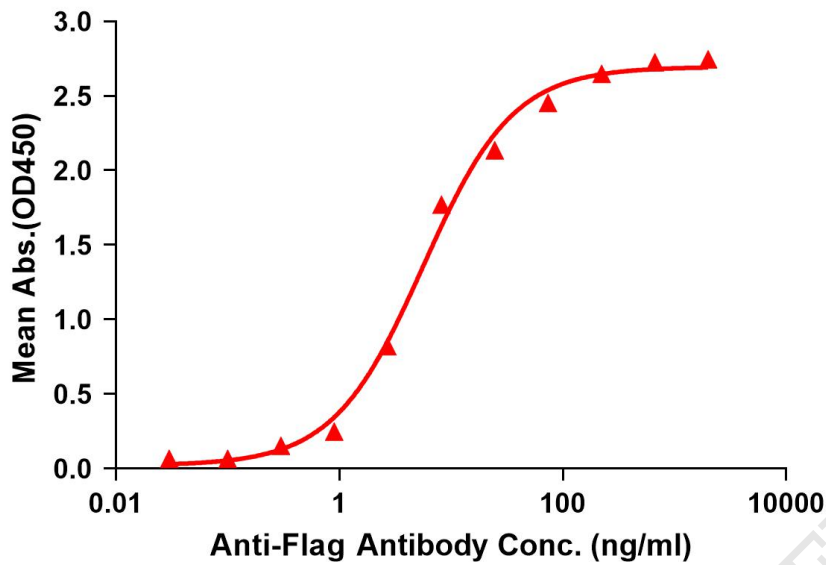


Figure 1. Elisa plates were pre-coated with Flag Tag NPY1R-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with NPY1R-Nanodisc is 5.641ng/ml.

kDa M R



Figure 2. WB analysis of Human NPY1R-Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution

