

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag Tag
<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. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) 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
<b>Conjugate</b>	Unconjugated



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

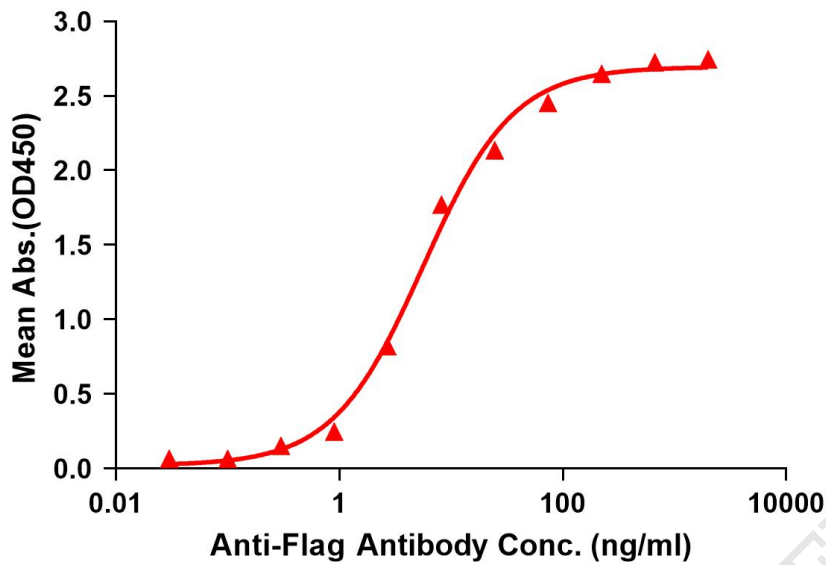


Figure 1. Elisa plates were pre-coated with Flag Tag NPY1R-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with NPY1R-Nanodisc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

kDa M R

250  
130  
100  
70  
55  
35  
25  
15  
10



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

