

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag Tag
<b>Expression Host</b>	HEK293
<b>Target</b>	GNRHR
<b>Synonyms</b>	GNRHR1; GRHR; HH7; LHRHR; LRHR
<b>Description</b>	Human GNRHR full length protein-synthetic nanodisc
<b>Uniprot ID</b>	P30968
<b>Protein Families</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways</b>	GnRH signaling pathway, Neuroactive ligand-receptor interaction
<b>Molecular Weight</b>	The human full length GNRHR protein has a MW of 37.7 kDa
<b>Delivery</b>	In Stock
<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>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
<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 receptor for type 1 gonadotropin-releasing hormone. This receptor is a member of the seven-transmembrane, G-protein coupled receptor (GPCR) family. It is expressed on the surface of pituitary gonadotrope cells as well as lymphocytes, breast, ovary, and prostate. Following binding of gonadotropin-releasing hormone, the receptor associates with G-proteins that activate a phosphatidylinositol-calcium second messenger system. Activation of the receptor ultimately causes the release of gonadotropic luteinizing hormone (LH) and follicle stimulating hormone (FSH). Defects in this gene are a cause of hypogonadotropic hypogonadism (HH). Alternative splicing results in multiple transcript variants encoding different isoforms.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



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

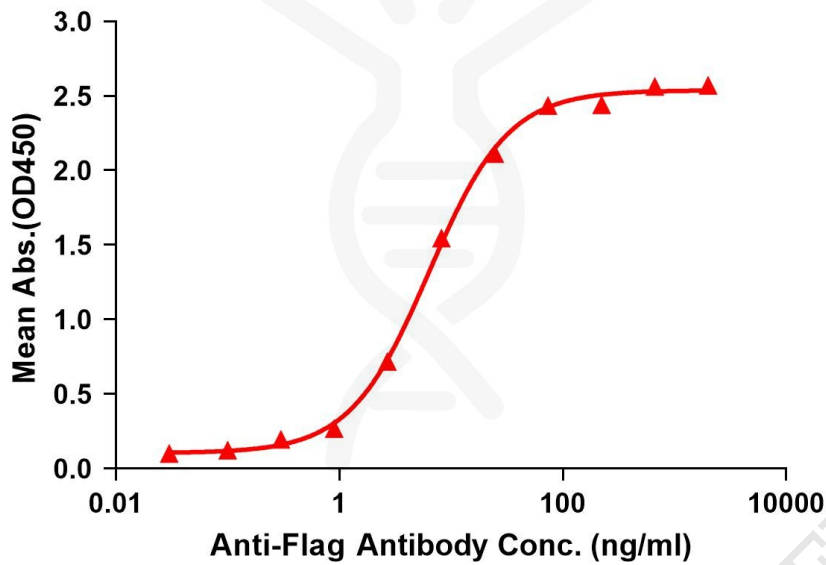


Figure 1. Elisa plates were pre-coated with Flag Tag GNRHR-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GNRHR-Nanodisc is 6.385ng/ml.

kDa M R

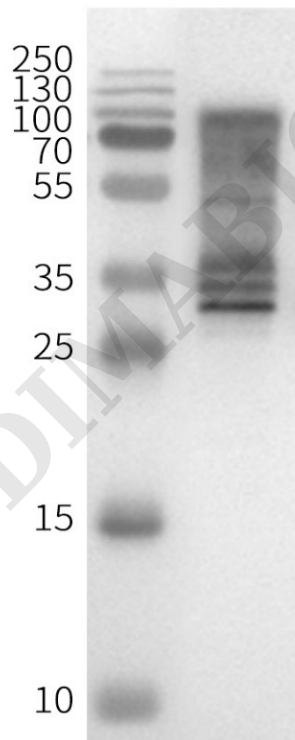


Figure 2. WB analysis of Human GNRHR-Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution

