

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	GNRHR
Synonyms	GNRHR1; GRHR; HH7; LHRHR; LRHR
Description	Human GNRHR-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	P30968
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	GnRH signaling pathway, Neuroactive ligand-receptor interaction
Molecular Weight	The human full length GNRHR-Strep protein has a MW of 37.7 kDa
Formulation & Reconstitution	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.
Storage&Shipping	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.
Background	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.
Usage	Research use only
Conjugate	Unconjugated



**ELISA assay to evaluate GNRHR-Strep-Nanodisc**  
0.2µg Human GNRHR-Strep-Nanodisc per well

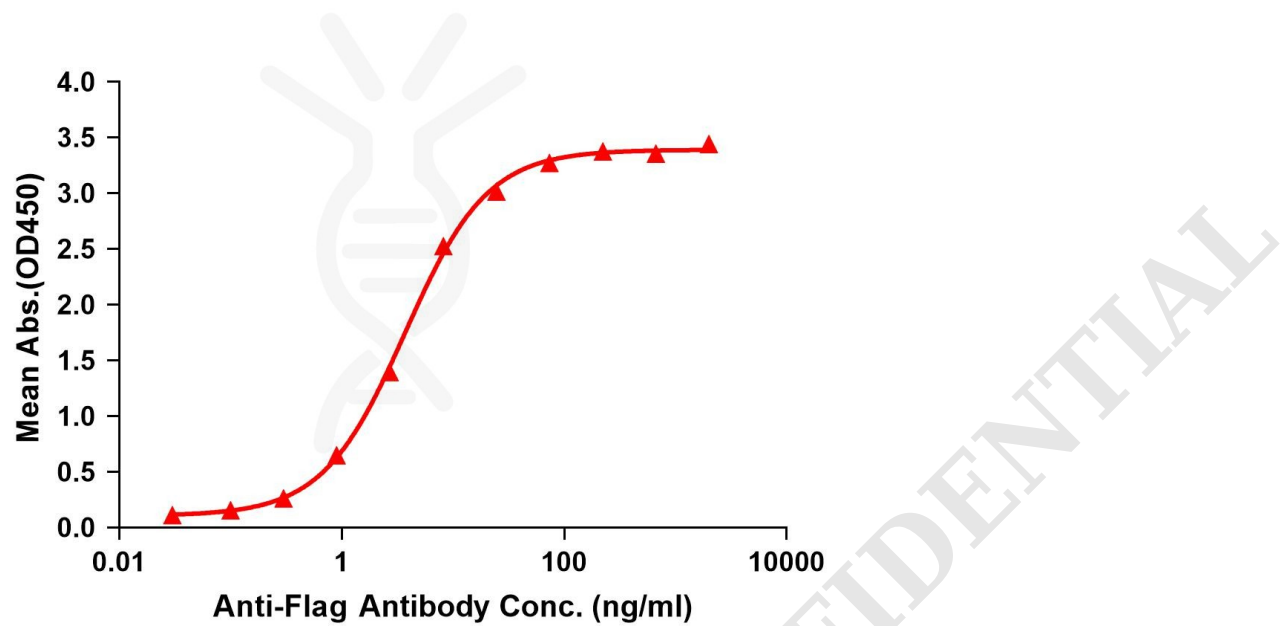


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag GNRHR-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GNRHR-Strep-nanodisc is 3.721ng/ml.

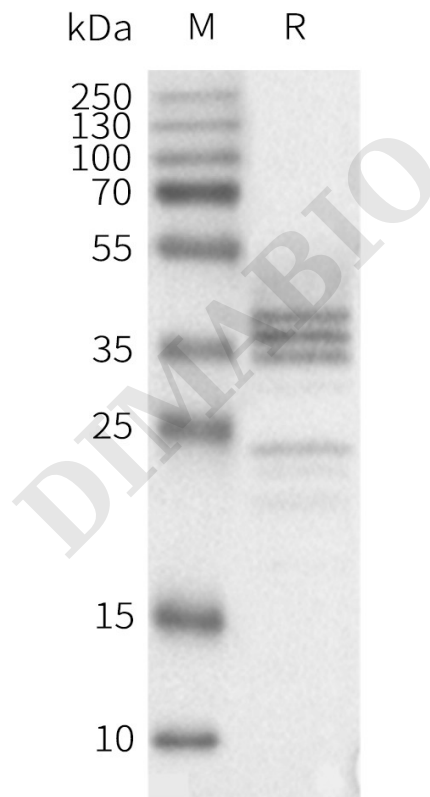


Figure 2. WB analysis of Human GNRHR-Strep-Nanodisc with Strep-Tactin HRP at 1/4000 dilution

