

**HUMAN GNRHR PROTEIN, HFC TAG****Cat.#:** 11646**Product Name:** Human GNRHR Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** GNRHR1;GRHR;HH7;LHRHR;LRHR**Target:** GNRHR**UNIPROT ID:** P30968**Description:** Recombinant Human GNRHR Protein with C-terminal human Fc tag

**Background:** This gene encodes the receptor for type I 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. More than 18 transcription initiation sites in the 5' region and multiple polyA signals in the 3' region have been identified for this gene. [provided by RefSeq, Jul 2008]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 30.2 kDa after removal of the signal peptide. The apparent molecular mass of GNRHR-hFc is approximately 35-55 kDa due to glycosylation.

**Molecular Characterization:** GNRHR(Met1-Arg38) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**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.

**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.



Figure 1. Human GNRHR Protein, hFc Tag on SDS-PAGE under reducing condition.