

## HUMAN HER2 PROTEIN, HFC TAG

**Cat.#:** 11461

**Product Name:** Human Her2 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** ERBB2;D340;ER-2/neu;ER2;LN19;EU;GL;KRI

**Target:** Her2

**UNIPROT ID:** P04626

**Description:** Recombinant Human Her2 with C-terminal human Fc tag

**Background:** This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 95.5 kDa after removal of the signal peptide. The apparent molecular mass of Her2-hFc is approximately 100–130 kDa due to glycosylation.

**Molecular Characterization:** Her2(Thr23–Thr652) 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.

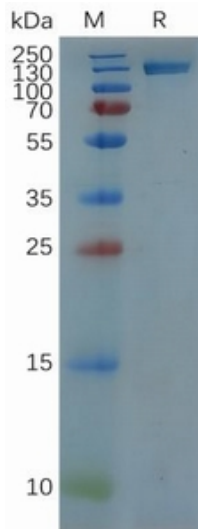


Figure 1. Human Her2 Protein, hFc Tag on SDS-PAGE under reducing condition.

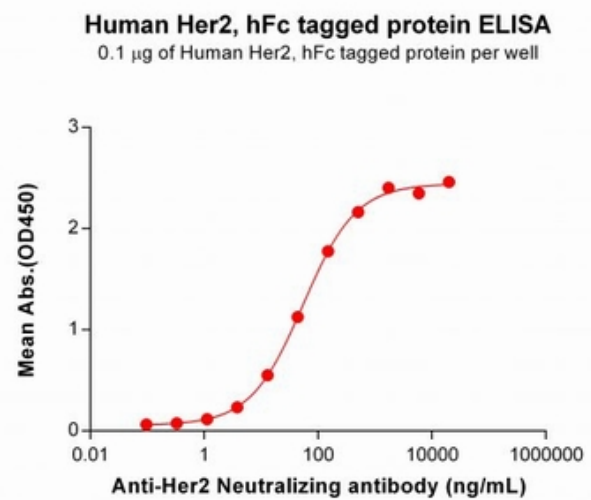


Figure 2. ELISA plate pre-coated by 1  $\mu$ g/ml (100  $\mu$ l/well) Human Her2 Protein, hFc Tag (11461) can bind Anti-ERBB2 Neutralizing antibody 28056 in a linear range of 3.81-1730.10 ng/mL.