



# Recombinant Protein Technical Manual

## Recombinant Human HER2/ErbB2 Protein (His Tag)(Active) RPES1206

### Product Data:

**Product SKU:** RPES1206

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_004439.2

### Protein Information:

**Molecular Mass:** 71 kDa

**AP Molecular Mass:** 10010 kDa

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human Erbb2 at 2.5 µg/ml (100 µl/well) can bind Herceptin with a linear ranger of 1.28-32 ng/ml.

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

1. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA.

2. Please contact us for any concerns or special

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Receptor tyrosine-protein kinase erbB-2; Metastatic lymph node gene 19 protein; Proto-oncogene Neu;Tyrosine kinase-type cell surface receptor HER2;

ERBB2;MLN19;NGL;TKR1;CD340;ENV;ENVW;ERVWE1;HER-2;HER-  
2/neu;HER2;HERV-7q;HERV-W-ENV;HERV7Q;HERVW;HERVWENV;MLN 19;TKR1

## Immunogen Information:

**Sequence:** Met 1-Thr 652

## Background:

Epidermal growth factor receptor 2 (HER2), also known as ErbB2, NEU, and CD340, is a type I membrane glycoprotein, and belongs to the epidermal growth factor (EGF) receptor family. HER2 protein cannot bind growth factors due to the lacking of ligand binding domain of its own and autoinhibited constitutively. However, HER2 forms a heterodimer with other ligand-bound EGF receptor family members, therefore stabilizes ligand binding and enhances kinase-mediated activation of downstream molecules. HER2 plays a key role in development, cell proliferation and differentiation. HER2 gene has been reported to associate with malignancy and a poor prognosis in numerous carcinomas, including breast, prostate, ovarian, lung cancers and so on.