

## Recombinant Human HER2/ErbB2 Protein (Fc Tag)

Catalog No. PKSH032989

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

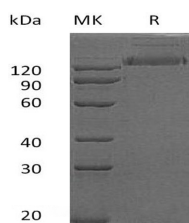
### Description

<b>Synonyms</b>	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
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Thr 23-Thr652
<b>Accession</b>	P04626
<b>Calculated Molecular Weight</b>	96.5 kDa
<b>Observed molecular weight</b>	120-145 kDa
<b>Tag</b>	C-Fc
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

Human epidermal growth factor receptor 2 (HER2) is a type of membrane glycoprotein; and belongs to the epidermal growth factor (EGF) receptor family. HER2 plays a key role in development; cell proliferation and differentiation. HER2 has been reported to associate with malignancy and a poor prognosis in numerous carcinomas; including breast; prostate; ovarian; lung cancers and so on. HER2 is activated by dimerization and not activated by EGF; TGF-alpha and amphiregulin. Interaction with PTK6 increases its intrinsic kinase activity. It is heterodimer with EGFR; ERBB3 and ERBB4. HER2 associates with the 5'-TCAAATTC-3' sequence in the PTGS2/COX-2 promoter and activates its transcription. It implicated in transcriptional activation of CDKN1A and the function of the protein involves STAT3 and SRC. And also it involved in the transcription of rRNA genes by RNA Pol I and enhances protein synthesis and cell growth.