



# Recombinant Human HER2 (C-6His)

<b>Catalog #</b>	EPT219
<b>Expression Host</b>	Human Cells
<b>DESCRIPTION</b>	Recombinant Human Receptor Tyrosine-protein Kinase ErbB-2 is produced by our Mammalian expression system and the target gene encoding Thr23-Thr652 is expressed with a 6His tag at the C-terminus.
<b>Accession</b>	P04626
<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
<b>Mol Mass</b>	70.2 KDa
<b>AP Mol Mass</b>	90-120 KDa, reducing conditions
<b>Purity</b>	Greater than 90% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.





## FORMULATION

Lyophilized from a 0.2  $\mu\text{m}$  filtered solution of PBS, pH 7.4.

## RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{ml}$ .

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

## 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.

## SDS-PAGE

