

# Active Recombinant Human ERBB2 Protein, DDDDK-tagged

Cat. No. ERBB2-177H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human ERBB2 Protein (NP_004439.2, 1-652aa), was expressed in HEK293 cell with C-terminal DDDDK tag.
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>ProteinLength</b>	1-652 aa
<b>Description</b>	<p>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.</p>
<b>Predicted N Terminal</b>	Thr 23
<b>Bio-activity</b>	1. Measured by its binding ability in a functional ELISA. Immobilized Human

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Her2/ERBB2 at 2 µg/mL (100 µL/well) can bind Herceptin, the EC50 of Herceptin is 7.0-30.0 ng/mL.

2. Measured by its ability to block anti-ErbB2 mediated inhibition of BT474 human breast ductal carcinoma cell proliferation. The ED50 for this effect is 0.4-2.4 µg/mL in the presence of 0.6 µg/mL Anti-ErbB2/Her2 Monoclonal Antibody.

**Molecular Mass** 70 kDa

**Endotoxin** < 1 EU/µg protein as determined by the LAL method.

**Purity** > 95% by SDS-PAGE

**Storage** Samples are stable for up to twelve months from date of receipt at -20 centigrade to -80 centigrade  
Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

**Storage Buffer** Lyophilized from sterile PBS, pH 7.4.  
Please contact us for any concerns or special requirements.  
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.


**Shipping** At ambient temperature.  
Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

## GENE INFORMATION

**Gene Name** [ERBB2 erb-b2 receptor tyrosine kinase 2 \[ Homo sapiens \(human\) \]](#)

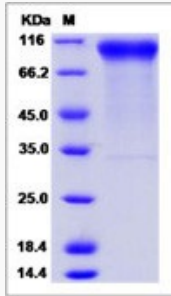
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<b>Official Symbol</b>	ERBB2
<b>Synonyms</b>	ERBB2; erb-b2 receptor tyrosine kinase 2; NEU; NGL; HER2; TKR1; CD340; HER-2; MLN 19; HER-2/neu;
<b>Gene ID</b>	2064
<b>mRNA Refseq</b>	NM_004448
<b>Protein Refseq</b>	NP_004439
<b>MIM</b>	164870
<b>UniProt ID</b>	P04626

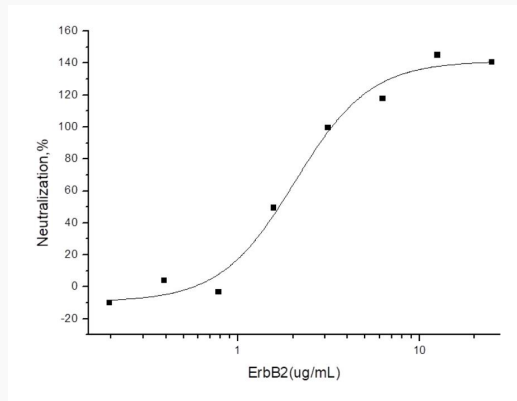
**SDS-PAGE**



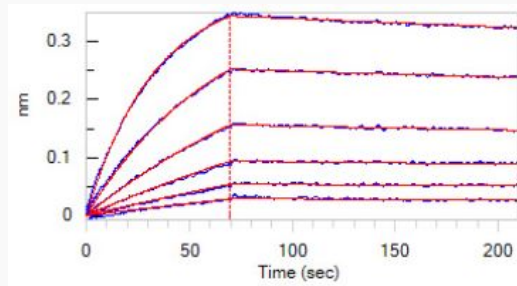
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Measured by its binding ability in a functional ELISA. Immobilized Human Her2/ERBB2 at 2  $\mu\text{g}/\text{mL}$  (100  $\mu\text{L}/\text{well}$ ) can bind Herceptin, the EC50 of Herceptin is 7.0-30.0  $\text{ng}/\text{mL}$ .

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