

Recombinant Human ErbB-2/HER2/CD340 Protein

Catalog No.: RP00182 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	2064	P04626

Tags

C-His

Synonyms

ERBB2; CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1; MLN19; erb-b2 receptor tyrosine kinase 2; ErbB2; Phospho-ErbB2 (Y1139); CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1; erb-b2 receptor tyrosine kinase 2; HER2/ErbB2; MLN19

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥ 90 % as determined by HPLC.

Calculated MW	Observed MW
70.19 kDa	100-120 kDa

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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. ErbB2 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. 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.

Basic Information

Description

Recombinant Human ErbB-2/HER2/CD340 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Thr23-Thr652) of human HER2/ErbB2 (Accession #NP_004439.2) fused with a 6×His tag at the C-terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized recombinant human ERBB2 at 10 ng/mL (100 μL/well) can bind Trastuzumab with a linear range of 4-20 ng/mL.

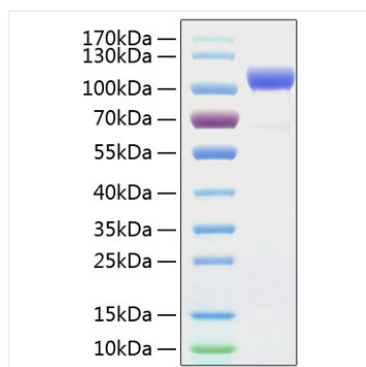
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

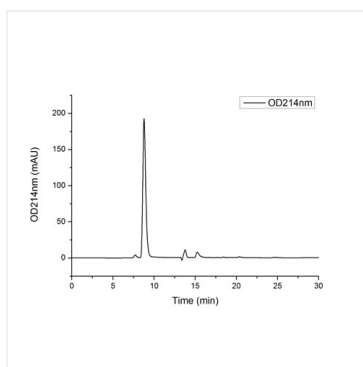
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

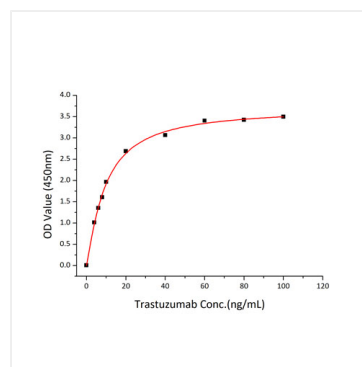
Validation Data



Recombinant Human ErbB-2/HER2/CD340 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of Human HER2/ErbB2 Protein (Cat.RP00182) was greater than 90% as determined by SEC-HPLC.



Immobilized recombinant human ERBB2 at 10 ng/mL (100 μ L/well) can bind Trastuzumab with a linear range of 4-20 ng/mL.