

Her2/ERBB2 Active Protein | ERBB2 active protein

Her2/ERBB2 Protein, Human, Recombinant (ECD), Biotinylated

CATALOG #
AAA257810

HOST
HEK293 Cells

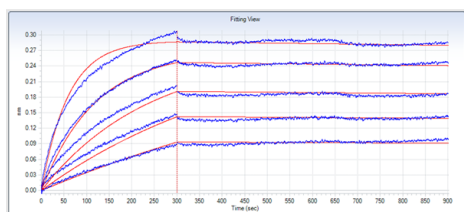
PRODUCT SYNONYMS

Her2/ERBB2; Her2/ERBB2 Protein; Human; Recombinant (ECD); Biotinylated; CD340; ENV; ENVW; ERVWE1; HER-2; HER-2/neu; HER2; HERV-7q; HERV-W-ENV; HERV7Q; HERVW; HERVWENV; MLN 19; MLN19; NEU;NGL; TKR1; ERBB2 active protein

PRODUCT SPECIFICATIONS

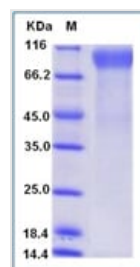
Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE >95 % as determined by SEC-HPLC.
Form/Format	Lyophilized from sterile PBS, pH7.4, 5% Trehalose, 5% Mannitol, 0.01% Tween-80
Sequence	Met1-Thr65 2
Source	Human
Endotoxin	<1.0EU per ug protein as determined by the LAL method.
Predicted N Terminal	Thr 23
Protein Construction	A DNA sequence encoding the human ERBB2 (NP_004439.2)(Met1-Thr652) was expressed with five amino acids (DDDDK) at the C-terminus. The purified protein was biotinylated in vitro.
Reconstitution	It is recommended that the sterile water (400ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV.
Biological Activity	1. Immobilized Anti-ErbB2 Antibody at 2 ug/ml (100 ul/well) can bind Recombinant Human HER2 / ErbB2 Protein (ECD), Biotinylated , the EC ₅₀ is 0.8-2.6 ng/mL. 2. Using the Octet RED System, the affinity constant (Kd) of Her2 / ERBB2 Protein, Human, Recombinant, Biotinylated bound to Pertuzumab was 0.1 nM.
Preparation and Storage	Samples are stable for twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

IMAGES



Application Data

Using the Octet RED System, the affinity constant (Kd) of Her2 / ERBB2 Protein, Human, Recombinant, Biotinylated bound to Pertuzumab was 0.1 nM.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for ERBB2 active protein	Background: Human 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.
Product Categories/Family for ERBB2 active protein	Cancer Drug Targets Receptor Tyrosine Kinases (RTKs)
References	Krawczyk N, et al. (2009) HER2 status on persistent disseminated tumor cells after adjuvant therapy may differ from initial HER2 status on primary tumor. Anticancer Res. 29(10): 4019-24.

NCBI AND UNIPROT INFORMATION

NCBI GI #	54792096
NCBI GeneID	2064
NCBI Accession #	NP_004439.2
NCBI GenBank Nucleotide #	NM_004448.3
UniProt Accession #	P04626; Q14256; Q6LDV1; Q9UMK4; B2RZG3; B4DHN3; X5D2V5
Molecular Weight	The recombinant human ERBB2 consists of 636 amino acids and predicts a molecular mass of 70 kDa. As a result of glycosylation, human ErbB2 migrates as an approximately 96.7 kDa protein in SDS-PAGE under reducing conditions.
NCBI Official Full Name	receptor tyrosine-protein kinase erbB-2 isoform a
NCBI Official Synonym Full Names	erb-b2 receptor tyrosine kinase 2
NCBI Official Symbol	ERBB2
NCBI Official Synonym Symbols	NEU; NGL; HER2; TKR1; CD340; HER-2; MLN 19; HER-2/neu
NCBI Protein Information	receptor tyrosine-protein kinase erbB-2; herstatin; p185erbB2; proto-oncogene Neu; c-erb B2/neu protein; proto-oncogene c-ErbB-2; metastatic lymph node gene 19 protein; human epidermal growth factor receptor 2; neuro/glioblastoma derived oncogene homolog;
UniProt Protein Name	Receptor tyrosine-protein kinase erbB-2
UniProt Gene Name	ERBB2
UniProt Synonym Gene Names	HER2; MLN19; NEU; NGL; MLN 19
UniProt Entry Name	ERBB2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.