

Human CellExp™ Her2/ErbB2, Extracellular Domain (ED), Human Recombinant

CATALOG NO:	P1160-10	10 µg
	P1160-50	50 µg
ALTERNATE NAMES:	erbB-2, MNL 19, CD340, Neu, c-ErbB-2, NEU, NGL, TKR1	
SOURCE:	HEK 293 cells (Thr 23-Thr 652)	
PURITY:	> 95% by SDS-PAGE	
MOL. WEIGHT:	This protein is fused with polyhistidine tag at the C-terminus and has a calculated MW of ~70.6 kDa (23-652aa). Under reducing conditions the protein migrates as ~95 kDa polypeptide in SDS-PAGE due to glycosylation.	
FORM:	Lyophilized	
FORMULATION:	Lyophilized from 0.22 µm filtered solution in PBS pH 7.4. Generally 5-8% Mannitol or Trehalose is added as a protectant before lyophilization.	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -80°C. Avoid repeated freezing and thawing cycles.	
RECONSTITUTION:	Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration up to 0.2 mg/ml.	
DESCRIPTION:	Human Epidermal growth factor Receptor 2 (HER2) is also called ERBB2, HER-2, HER-2 /neu, NEU, NGL, TKR1 and c-erb B2, and is a protein involved in higher aggressiveness of breast cancers. It is a member of the ErbB protein family, more commonly known as the epidermal growth factor receptor family. HER2 is a cell membrane surface-bound receptor tyrosine kinase and is normally involved in the signal transduction pathways leading to cell growth and differentiation. HER2 is thought to be an orphan receptor, with none of the EGF family of ligands able to activate it. Approximately 30% of breast cancers have an amplification of the HER2 gene or overexpression of its protein product. Overexpression of this receptor in breast cancer is associated with increased disease recurrence and worse prognosis. HER2 appears to play roles in development, cancer, communication at the neuromuscular junction and regulation of cell growth and differentiation.	
BIOLOGICAL ACTIVITY:	Immobilized Human Her2 (ED) at 0.05 µg/ml (100 µl/well) can bind trastuzumab (Herceptin) with a linear range of 0.05-3 ng/ml.	

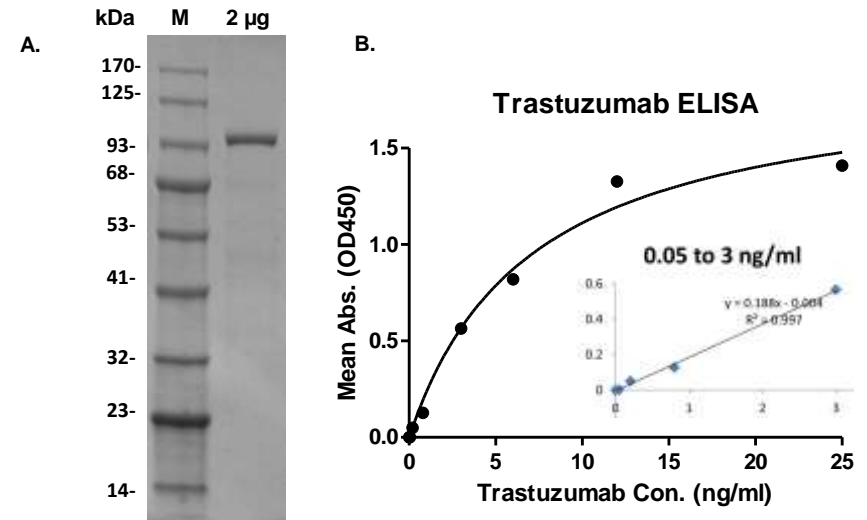


Fig A. SDS-PAGE (4-20%) of Recombinant Her2 (ED): Recombinant protein loaded under reducing conditions and stained with Coomassie Blue. The protein shows a predicted MW of ~ 95 kDa

Fig B. Biological activity: Immobilized Human Her2 (ED) at 0.05 µg/ml (100 µl/well) can bind Trastuzumab (Herceptin) with a linear range of 0.05-3 ng/ml

RELATED PRODUCT:

- HER2, Active (**Cat. No. 7762-10, -100**)
- HER2/ErbB2 Antibody (**Cat. No. 3783-100**)
- Human CellExp™ ErbB2 / HER2 / CD340, human recombinant (**Cat. No. 7397-10**)
- Human CellExp™ HER1/ErbB1, human recombinant (**Cat. No. 7396-10**)
- EGF Receptor, human recombinant (**Cat. No. 7135-10, -50**)
- ErbB4/HER4 (His Tagged), Human Recombinant (**Cat. No. 7773-5**)
- HER2, Active (**Cat. No. 7762-5, -100**)
- HER2/ErbB2 Antibody (**Cat. No. 3783-100**)

FOR RESEARCH USE ONLY! Not to be used on humans.