

### ARG83043 Human ERBB2 / HER2 ELISA Kit

Package: 96 wells Store at: 4°C

## Summary

Product Description	ARG83043 Human ERBB2 / HER2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human ERBB2 / HER2 in serum, plasma (heparin), ascites, urine and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	Not cross-reacts with: Human EGF R / ErbB1, ErbB3, ErbB4. Mouse ErbB2 / Her2.
Target Name	ERBB2 / HER2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	23.44 pg/ml
Sample Type	Serum, plasma (heparin), ascites, urine and cell culture supernatants.
Standard Range	46.875 - 3000 pg/ml
Sample Volume	100 μΙ
Precision	Intra-Assay CV: less than 10% Inter-Assay CV: less than 10%
Alternate Names	ERBB2, Erb B2 Receptor Tyrosine Kinase 2, HER2, NEU, C ERB 2, C ERB2, HER 2, CD340, NGL, V Erb B2 Avian Erythroblastic Leukemia Viral Oncogene Homolog 2, Tyrosine Kinase Type Cell Surface Receptor HER2, Neuro / Glioblastoma Derived Oncogene Homolog, Human Epidermal Growth Factor Receptor 2, Receptor Tyrosine Protein Kinase ErbB 2, Metastatic Lymph Node Gene 19 Protein, Proto Oncogene C ErbB 2, Proto Oncogene Neu, P185(ErbB2), EC 2.7.10.1, MLN 19, MLN 19, V Erb B2 Avian Erythroblastic Leukemia Viral Oncogene Homolog 2 (Neuro / Glioblastoma Derived Oncogene Homolog), V Erb B2 Erythroblastic Leukemia Viral Oncogene Homolog 2, Neuro / Glioblastoma Derived Oncogene Homolog, V Erb B2 Avian Erythroblastic Leukemia Viral Oncoprotein 2, Neuroblastoma / Glioblastoma Derived Oncogene Homolog, Metastatic Lymph Node Gene 19, C Erb B2 / Neu Protein, CD340 Antigen, HER 2 / Neu, Herstatin, P185erbB2, EC 2.7.10, VSCN2, MLN19, TKR1

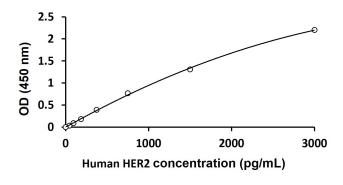
### **Application Instructions**

Assay Time	~ 4 hours
Properties	
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

#### **Bioinformation**

Gene Symbol	ERBB2
Gene Full Name	Erb-B2 Receptor Tyrosine Kinase 2
Background	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. [provided by RefSeq, Jul 2008]
Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization. [UniProt]
Highlight	

# Images



#### ARG83043 Human HER2 / ErbB2 ELISA Kit standard curve image

ARG83043 Human HER2 / ErbB2 ELISA Kit results of standard run with optical density reading at 450  $\rm nm$