

ARG81734 Human ERBB2 / HER2 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81734-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81734-002	Standard	2 X 10 ng/vial	4°C
ARG81734-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81734-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81734-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81734-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81734-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81734-008	25X Wash buffer	20 ml	4°C
ARG81734-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81734-010	STOP solution	10 ml (Ready to use)	4°C
ARG81734-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81734 Human ERBB2 / HER2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human ERBB2 / HER2 in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	ERBB2 / HER2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	31.3 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	62.5 - 4000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 7.1%; Inter-Assay CV: 8.0%
Alternate Names	p185erbB2; Proto-oncogene c-ErbB-2; Metastatic lymph node gene 19 protein; Proto-oncogene Neu; NGL; EC 2.7.10.1; CD340; CD antigen CD340; TKR1; HER-2; Tyrosine kinase-type cell surface receptor HER2; HER2; NEU; HER-2/neu; MLN 19; Receptor tyrosine-protein kinase erbB-2

Application Instructions

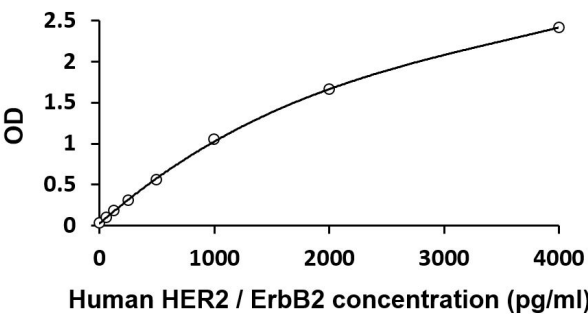
Assay Time	~ 5 hours
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Properties

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	<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. [provided by RefSeq, Jul 2008]</p>
Function	<p>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.</p> <p>In the nucleus is involved in transcriptional regulation. Associates with the 5'-TCAAATTC-3' sequence in the PTGS2/COX-2 promoter and activates its transcription. Implicated in transcriptional activation of CDKN1A; the function involves STAT3 and SRC. Involved in the transcription of rRNA genes by RNA Pol I and enhances protein synthesis and cell growth. [UniProt]</p>
Highlight	<p>Related products: ERBB2 antibodies; ERBB2 ELISA Kits; ERBB2 Duos / Panels; New ELISA data calculation tool: Simplify the ELISA analysis by GainData</p>
PTM	<p>Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases phosphorylation on tyrosine residues (PubMed:27134172). Signaling via SEMA4C promotes phosphorylation at Tyr-1248 (PubMed:17554007). Dephosphorylated by PTPN12 (PubMed:27134172). [UniProt]</p>



ARG81734 Human HER2 / ErbB2 ELISA Kit standard curve image

ARG81734 Human HER2 / ErbB2 ELISA Kit results of a typical standard run with optical density reading at 450 nm.