

## ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody

Package: 100 µl, 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes ERBB2 / HER2 phospho (Tyr1248)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ERBB2 / HER2
Species	Human
Immunogen	Peptide sequence around phosphorylation site of tyrosine1248 (P-E-Y(p)-L-G) derived from Human HER2 / ErbB2.
Conjugation	Un-conjugated
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

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

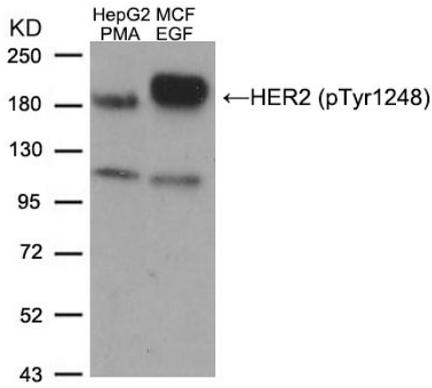
### Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml

<b>Storage instruction</b>	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

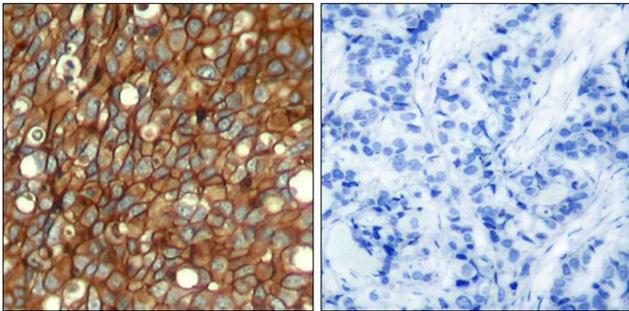
## Bioinformation

<b>Database links</b>	<a href="#">GeneID: 13866 Mouse</a> <a href="#">GeneID: 2064 Human</a> <a href="#">Swiss-port # P04626 Human</a> <a href="#">Swiss-port # P70424 Mouse</a>
<b>Gene Symbol</b>	ERBB2
<b>Gene Full Name</b>	erb-b2 receptor tyrosine kinase 2
<b>Background</b>	Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Not activated by EGF, TGF-alpha and amphiregulin.
<b>Function</b>	<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>
<b>Research Area</b>	Cancer antibody; Controls and Markers antibody; Signaling Transduction antibody; Circulating Tumor Cells BioMarker antibody
<b>Calculated Mw</b>	138 kDa
<b>PTM</b>	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).



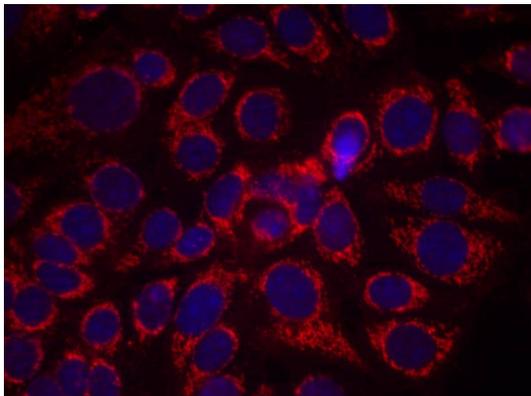
ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody WB image

Western blot: Extracts from HepG2 cells treated with PMA and MCF cells treated with EGF, stained with ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody.



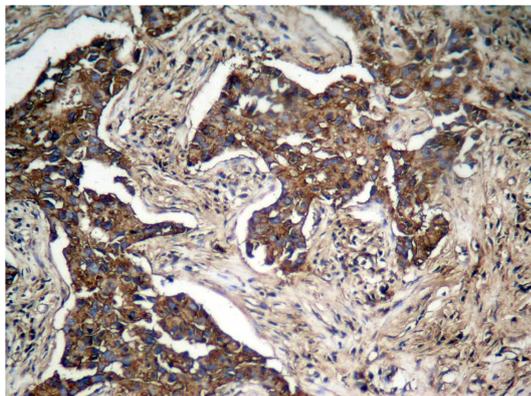
ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody ICC/IF image

Immunofluorescence: methanol-fixed MCF7 cells stained with ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody.



ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung carcinoma tissue, stained with ARG51582 anti-ERBB2 / HER2 phospho (Tyr1248) antibody.