

### Product datasheet

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# ARG51578 anti-ERBB2 / HER2 phospho (Tyr877) antibody

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

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes ERBB2 / HER2 phospho (Tyr877)

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 tyrosine 877 (T-E-Y(p)-H-A) derived from Human

HER2.

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 chromatogramphy using non-

phosphopeptide.

Buffer PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Concentration 1 mg/ml

Storage instruction 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.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GenelD: 13866 Mouse

GeneID: 2064 Human

Swiss-port # P04626 Human

Swiss-port # P70424 Mouse

Gene Symbol ERBB2

Gene Full Name erb-b2 receptor tyrosine kinase 2

Background 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.

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.

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]

Highlight Related Antibody Duos and Panels:

ARG30237 Phospho HER2 Antibody Duo (Total, pY877)

Related products:

ERBB2 antibodies; ERBB2 ELISA Kits; ERBB2 Duos / Panels; Anti-Rabbit IgG secondary antibodies;

Research Area Cancer antibody; Controls and Markers antibody; Signaling Transduction antibody; Circulating Tumor

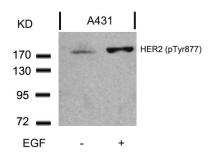
Cells BioMarker antibody

Calculated Mw 138 kDa

PTM Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor

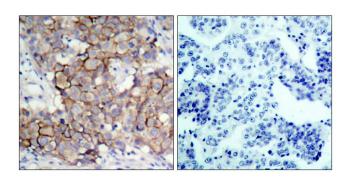
phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases phosphorylation on tyrosine residues (PubMed:27134172). Signaling via SEMA4C promotes

phosphorylation at Tyr-1248 (PubMed:17554007). Dephosphorylated by PTPN12 (PubMed:27134172).



#### ARG51578 anti-ERBB2 / HER2 phospho (Tyr877) antibody WB image

Western blot: Extracts from A431 cells untreated or treated with EGF stained with ARG51578 anti-ERBB2 / HER2 phospho (Tyr877) antibody.



## ARG51578 anti-ERBB2 / HER2 phospho (Tyr877) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue, stained with ARG51578 anti-ERBB2 / HER2 phospho (Tyr877) antibody (left) or the same antibody preincubated with blocking peptide (right).