

**ERBB2 Antibody(N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7629a****Specification**

---

**ERBB2 Antibody(N-term) - Product Information**

Application	<b>WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">P04626</a>
Other Accession	<a href="#">P06494</a> , <a href="#">P70424</a>
Reactivity	<b>Human</b>
Predicted	<b>Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>21-52</b>

**ERBB2 Antibody(N-term) - Additional Information****Gene ID** 2064**Other Names**

Receptor tyrosine-protein kinase erbB-2, Metastatic lymph node gene 19 protein, MLN 19, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, Tyrosine kinase-type cell surface receptor HER2, p185erbB2, CD340, ERBB2, HER2, MLN19, NEU, NGL

**Target/Specificity**

This ERBB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 21-52 amino acids from the N-terminal region of human ERBB2.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ERBB2 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ERBB2 Antibody(N-term) - Protein Information**

**Name** ERBB2

**Synonyms** HER2, MLN19, NEU, NGL

**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.

#### Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Internalized from the cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm. Nucleus.

#### Tissue Location

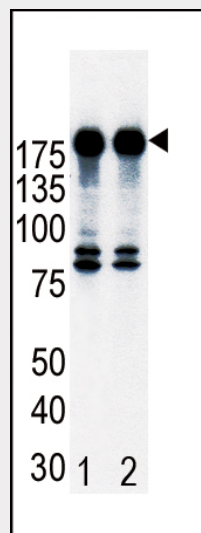
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

### ERBB2 Antibody(N-term) - Protocols

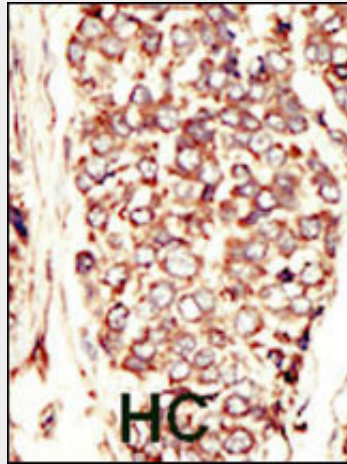
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

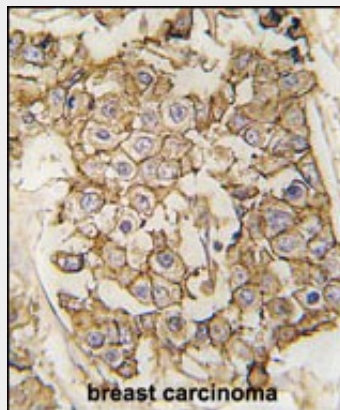
### ERBB2 Antibody(N-term) - Images



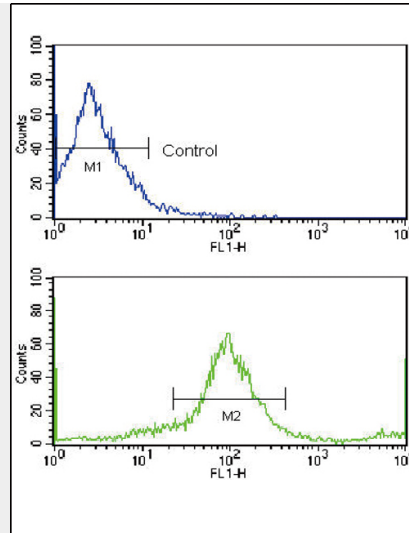
Western blot analysis of ErbB2 (arrow) in T47D cell lysates, either noninduced (Lane 1) or induced with HRG (Lane 2).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with HER2/ErbB2 antibody (N-term) (Cat.#AP7629a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of MCF-7 cells using HER2/ErbB2 Antibody (N-term) (bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **ERBB2 Antibody(N-term) - Background**

ErbB2, a member of the EGF receptor family, is an essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. This protein is not activated by EGF, TGF-alpha and amphiregulin. ErbB2 potentially forms a heterodimer with each of the other ERBB receptors. An Interaction with PRKCABP has been suggested. Ligand-binding to this Type I membrane protein may increase phosphorylation on tyrosine residues

### **ERBB2 Antibody(N-term) - References**

- Ehsani, A., et al., Genomics 15(2):426-429 (1993).
- Yamamoto, T., et al., Nature 319(6050):230-234 (1986).
- Coussens, L., et al., Science 230(4730):1132-1139 (1985).
- Semba, K., et al., Proc. Natl. Acad. Sci. U.S.A. 82(19):6497-6501 (1985).

### **ERBB2 Antibody(N-term) - Citations**

- [Resistance to receptor-blocking therapies primes tumors as targets for HER3-homing nanobiologics.](#)