

**ERBB2 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8446b**

**Specification**

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**ERBB2 Antibody - Product Information**

Application	IHC, WB,E
Primary Accession	<a href="#">P04626</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b, $\kappa$
Antigen Region	102-339

**ERBB2 Antibody - 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 a mouse immunized with a recombinant protein.

**Dilution**

IHC~~1:1000

WB~~1:1000

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, 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 is for research use only and not for use in diagnostic or therapeutic procedures.

**ERBB2 Antibody - 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**

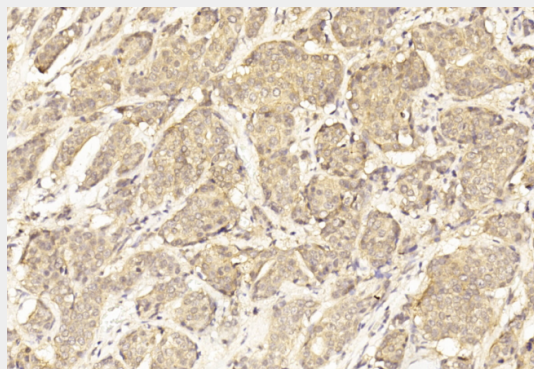
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

### **ERBB2 Antibody - Protocols**

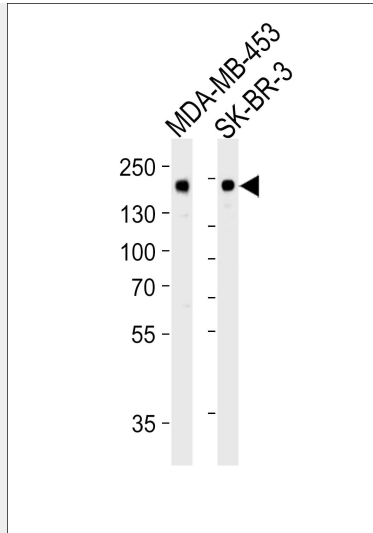
Provided below are standard protocols that you may find useful for product applications.

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

### **ERBB2 Antibody - Images**



Immunohistochemical analysis of paraffin-embedded Human Breast cancer section using Pink1(Cat#AM8446b). AM8446b was diluted at 1:1000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Western blot analysis of lysate from MDA-MB-453, SK-BR-3 cell line (from left to right), using ERBB2 Antibody (1423CT594. 76. 52). 1423CT594. 76. 52 was diluted at 1:1000. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20 $\mu$ g per lane.

#### **ERBB2 Antibody - Background**

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.

#### **ERBB2 Antibody - References**

- Yamamoto T.,et al.Nature 319:230-234(1986).
- Coussens L.,et al.Science 230:1132-1139(1985).
- Wakamatsu A.,et al.Submitted (OCT-2007) to the EMBL/GenBank/DDBJ databases.
- Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
- Tal M.,et al.Mol. Cell. Biol. 7:2597-2601(1987).