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ERBB2 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5248

Specification

ERBB2 Antibody - Product Information

Application	**WB,E**
Primary Accession	P04626
Reactivity	**Human**
Host	**Mouse**
Clonality	**monoclonal**
Calculated MW	**H=140,71,63,136,135,97 KDa**
Isotype	**IgG2b,κ**
Antigen Source	**HUMAN**

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

Dilution
WB~~1:1000

Target/Specificity
This ERBB2 antibody is generated from a mouse immunized with a recombinant protein.

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.

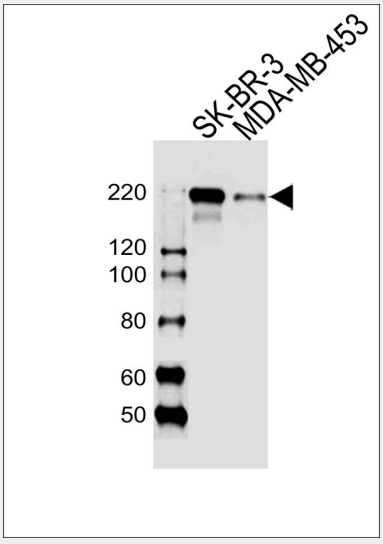
Tissue Location
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

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 Cytomety
- Cell Culture

ERBB2 Antibody - Images



Western blot analysis of lysate from SK-BR-3,MDA-MB-453 cell line (from left to right), using ERBB2 Antibody (Cat. #AW5248). AW5248 was diluted at 1:1000. A goat anti-mouse IgG H&L(HRP) at 1:5,000 dilution was used as the secondary antibody.Lysate at 20ug per lane.

ERBB2 Antibody - Background

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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).