

HER2/ErbB2 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10603**Specification**

HER2/ErbB2 Antibody - Product Information

Application	WB
Primary Accession	P04626
Other Accession	NP_004439.2
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	137910

HER2/ErbB2 Antibody - Additional Information**Gene ID 2064**

Application & Usage	Western blotting (1:500 - 1:2000). However, the optimal concentrations should be determined individually. HeLa cell lysate can be used as a positive control. The antibody recognizes the ErbB2 of human and mouse origin. Reactivity to other species has not been tested.
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Other Names

ErbB2, ErbB-2, c-erb B2, v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, HER2, HER-2, Neu, NGL, Neuroblastoma- or Glioblastoma-Derived, TKR1, Tyrosine Kinase-type Cell Surface Receptor Her2

Target/Specificity

ErbB2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

HER2/ErbB2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HER2/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.

HER2/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](#)

HER2/ErbB2 Antibody - Images**HER2/ErbB2 Antibody - Background**

Human Epidermal growth factor Receptor 2 (HER2) is also called ERBB2, HER-2, HER-2 /neu, NEU, NGL, TKR1 and c-erb B2, and is a protein giving higher aggressiveness in breast cancers. It is a member of the ErbB protein family, more commonly known as the epidermal growth factor receptor family. HER2 is a cell membrane surface-bound receptor tyrosine kinase and is normally involved in the signal transduction pathways leading to cell growth and differentiation. HER2 is thought to be an orphan receptor, with none of the EGF family of ligands able to activate it. Approximately 30% of

breast cancers have an amplification of the HER2 gene or overexpression of its protein product. Overexpression of this receptor in breast cancer is associated with increased disease recurrence and worse prognosis. HER2 appears to play roles in development, cancer, communication at the neuromuscular junction and regulation of cell growth and differentiation.