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ERBB2 / HER2 Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF3859a

Specification

ERBB2 / HER2 Antibody (internal region) - Product Information

Application	**IHC**
Primary Accession	P04626
Other Accession	NP_004439.2, NP_001005862.1, 2064
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**137910**

ERBB2 / HER2 Antibody (internal region) - Additional Information

Gene ID 2064

Other Names
Receptor tyrosine-protein kinase erbB-2, 2.7.10.1, 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

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ERBB2 / HER2 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ERBB2 / HER2 Antibody (internal region) - 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.

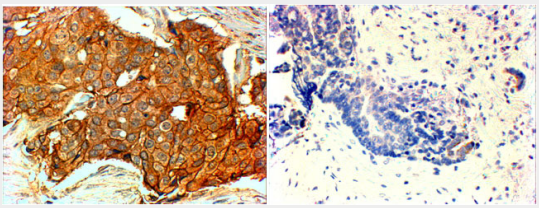
Tissue Location
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

ERBB2 / HER2 Antibody (internal region) - 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 / HER2 Antibody (internal region) - Images



AF3859a (4 µg/ml) staining of paraffin embedded Human breast cancer (Her+ left, triple negative right). Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

ERBB2 / HER2 Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP_004439.2; NP_001005862.1). The immunizing peptide represents part of the extracellular domain.

ERBB2 / HER2 Antibody (internal region) - References

HER2 overcomes PTEN (loss)-induced senescence to cause aggressive prostate cancer. Ahmad I, Patel R, Singh LB, Nixon C, Seywright M, Barnetson RJ, Brunton VG, Muller WJ, Edwards J, Sansom OJ, Leung HY. Proc Natl Acad Sci U S A. 2011 Sep 27;108(39):16392-7. PMID: 21930937