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ErbB2 (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7629b

Specification

ErbB2 (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P04626
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**137910**
Antigen Region	**1206-1236**

ErbB2 (C-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 1206-1236 amino acids from the C-terminal region of human ErbB2.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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

ErbB2 (C-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.

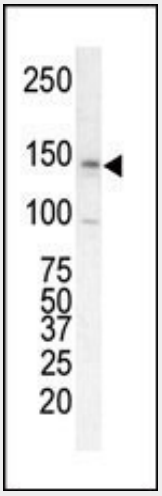
Tissue Location
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

ErbB2 (C-term) - Protocols

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

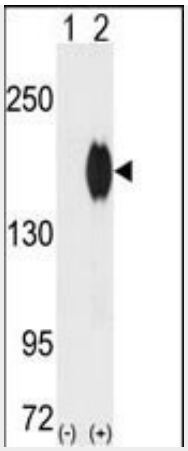
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ErbB2 (C-term) - Images

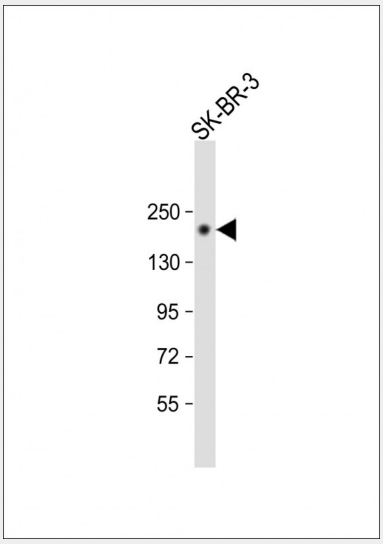


Western blot analysis of anti-ErbB2 Pab (Cat. #ap7629b) in T-47D cell lysate. ErbB2 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

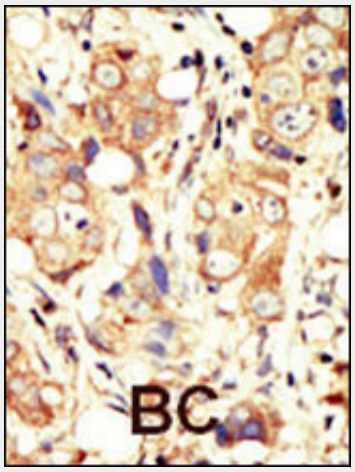
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Western blot analysis of ErbB2 (arrow) using HER2/ErbB2 Antibody (C-term) (Cat.#AP7629b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ErbB2 gene (Lane 2) (Origene Technologies).



Anti-ErbB2 Antibody (Y1221) at 1:1000 dilution + SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 138 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, 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. BC = breast carcinoma; HC = hepatocarcinoma.

ErbB2 (C-term) - Background

ErbB2, a member of the EGF receptor family, is an essential component of a neuregulin-receptor complex, althought 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 (C-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).