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# ERBB2 Antibody(C-term Y1248)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7629d

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | P04626 |
| **Other Accession** | P06494, P70424 |
| **Reactivity** | Human |
| **Predicted** | Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB15814 |
| **Calculated MW** | 137910 |
| **Antigen Region** | 1227-1255 |

## Additional Information

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| **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 1227-1255 amino acids from the C-terminal region of human ERBB2. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **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(C-term Y1248) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ERBB2 |

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| **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. |

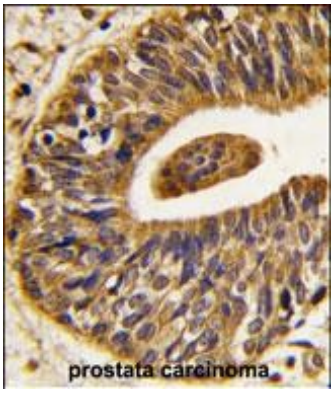
## Background

ErbB2, a member of the EGF receptor family, is an essential component of a neuregulin-receptor complex, although 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.

## References

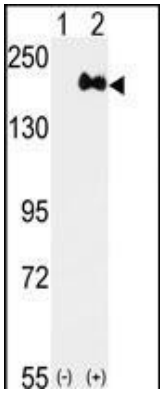
Ehsani, A., et al., Genomics 15(2):426-429 (1993).
Yamamoto, T., et al., Nature 319(6050):230-234 (1986).
Coussens, L., et al., Science 230(4730):1132-1139 (1985).
Semba, K., et al., Proc. Natl. Acad. Sci. U.S.A. 82(19):6497-6501 (1985).

## Images




Formalin-fixed and paraffin-embedded human prostata carcinoma tissue reacted with ErbB2 Antibody (C-term Y1248), 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.

Western blot analysis of ERBB2(arrow) using rabbit polyclonal ERBB2 Antibody (Y1248) (Cat.#AP7629d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ERBB2 gene (Lane 2)




(Origene Technologies).

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