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Phospho-HER2(Y1112) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3120a

Specification

Phospho-HER2(Y1112) Antibody - Product Information

Application	**WB, DB,E**
Primary Accession	P04626
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**137910**

Phospho-HER2(Y1112) 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

Target/Specificity
This HER2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y1112 of human HER2.

Dilution
WB~~1:2000
DB~~1:500
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
Phospho-HER2(Y1112) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-HER2(Y1112) 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.

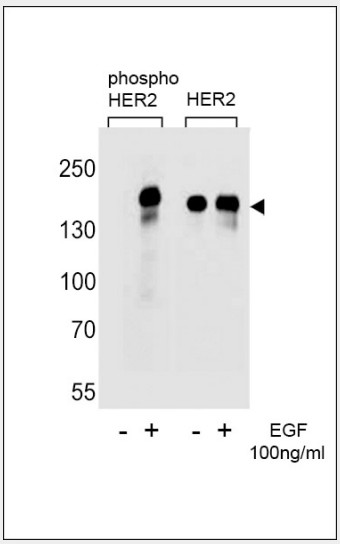
Tissue Location
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

Phospho-HER2(Y1112) 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

Phospho-HER2(Y1112) Antibody - Images



Western blot analysis of extracts from A431 cells,untreated or treated with EGF,100ng/ml□using

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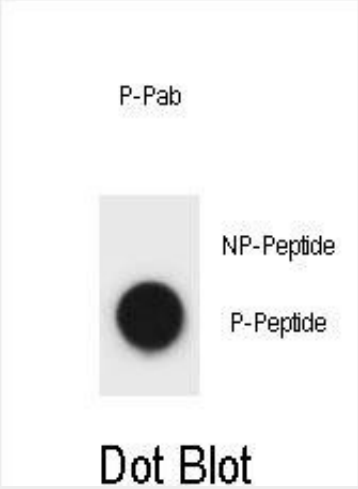
phospho HER2-Y1112 (left) or HER2 antibody(right)



Dot blot analysis of Phospho-HER2-pY1112 Phospho-specific Pab (Cat. #AP3120a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

Phospho-HER2(Y1112) Antibody - Background

ErbB2 is a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors.

Phospho-HER2(Y1112) Antibody - References

Provinciali, M., et al., Int. J. Cancer 115(1):36-45 (2005). Yee, L.D., et al., J. Nutr. 135(5):983-988 (2005). Beckers, J., et al., Int. J. Cancer 114(4):590-597 (2005). Brandt, B., et al., Biochem. Biophys. Res. Commun. 329(1):318-323 (2005). Ghatak, S., et al., J. Biol. Chem. 280(10):8875-8883 (2005).