

## Anti-HER2 (pY1248) Antibody

Rabbit polyclonal antibody to HER2 (pY1248) Catalog # AP60667

### Specification

## Anti-HER2 (pY1248) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IP, IF/IC, IHC <u>P04626</u> <u>P70424</u> Human, Mouse, Rat, Dog Rabbit Polyclonal 137910

### Anti-HER2 (pY1248) Antibody - Additional Information

Gene ID 2064

Other Names

HER2; MLN19; NEU; NGL; 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

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human HER2. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500), IP (1/10 - 1/100) IP~~N/A IF/IC~~N/A IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

### Anti-HER2 (pY1248) 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**

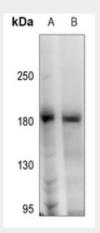
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

## Anti-HER2 (pY1248) Antibody - Protocols

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

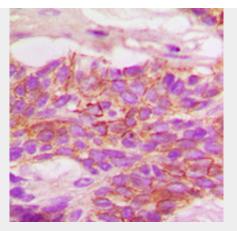
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-HER2 (pY1248) Antibody - Images

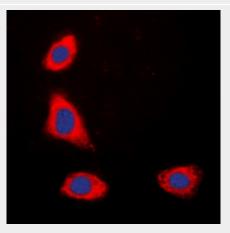


Western blot analysis of HER2 (pY1248) expression in MCF7 (A), EC9706 (B) whole cell lysates.





Immunohistochemical analysis of HER2 (pY1248) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of HER2 (pY1248) staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

# Anti-HER2 (pY1248) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human HER2. The exact sequence is proprietary.