

## HER2 (phospho Tyr1221/Y1222) Polyclonal Antibody

Catalog No: YP0865

**Reactivity:** Human; Mouse; Rat; Monkey

**Applications:** WB;IHC;IF;ELISA

Target: HER2

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine

resistance;>>Platinum drug resistance;>>MAPK signaling pathway;>>ErbB

signaling pathway;>>Calcium signaling pathway;>>HIF-1 signaling pathway;>>PI3K-Akt signaling pathway;>>Focal adhesion;>>Adherens junction;>>Tight junction;>>Pathways in cancer;>>Proteoglycans in cancer;>>MicroRNAs in cancer;>>Pancreatic cancer;>>Endometrial cancer;>>Prostate cancer;>>Bladder cancer;>>Non-small cell lung

cancer;>>Breast cancer;>>Gastric cancer;>>Central carbon metabolism in

cancer

Gene Name: ERBB2

**Protein Name:** Receptor tyrosine-protein kinase erbB-2

P04626

P70424

Human Gene Id: 2064

**Human Swiss Prot** 

No:

Mouse Gene Id: 13866

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P06494

**Immunogen:** Synthesized phospho-peptide around the phosphorylation site of human Neu

(phospho Tyr1221/Y1222)

**Specificity:** Phospho-Neu (Y1221/Y1222) Polyclonal Antibody detects endogenous levels of

Neu protein only when phosphorylated at Y1221/Y1222.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/4



Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 180kD

**Cell Pathway:** ErbB\_HER;Calcium;Focal adhesion;Adherens\_Junction;Pathways in

cancer:Pancreatic cancer:Endometrial cancer:Prostate cancer:Bladder

cancer; Non-small cell lung cancer;

**Background:** This gene encodes 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. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have

been reported, with the most common allele, Ile654/Ile655, shown here.

Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in

several additional transcript variants, some encoding d

Function: catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine

phosphate., disease: Defects in ERBB2 are associated with familial glioma of brain [MIM:137800]; also called glioblastoma multiforme. Gliomas are central nervous

system neoplasms derived from glial cells and comprise astrocytomas,

glioblastoma multiforme, oligodendrogliomas, and

ependymomas., disease: Defects in ERBB2 are associated with gastric cancer

[MIM:137215]; also known as hereditary familial diffuse gastric cancer

(HDGC).,disease:Defects in ERBB2 are associated with lung cancer

[MIM:211980]; also called adenocarcinoma of lung., disease: Defects in ERBB2 are associated with ovarian cancer [MIM:167000]. Ovarian cancer is the leading cause of death from gynecologic malignancy. It is characterized by advanced presentation with loco-regional dissemination in the peritoneal cavity and the rare

incidence of viscera

Subcellular Location:

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Early

endosome . Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus



requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1. Also detected in VPS35-positive endosome-to-TGN retrograde vesicles (PubMed:31138794). .; [Isoform 2]: Cytoplasm. Nucleus.; [Isoform 3]: Cytoplasm. Nucleus.

**Expression:** Expressed in a variety of tumor tissues including primary breast tumors and

tumors from small bowel, esophagus, kidney and mouth.

**Sort :** 10681

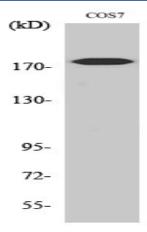
No2: 2243L

No4:

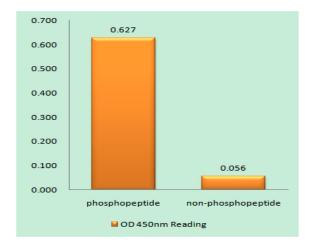
Host: Rabbit

Modifications: Phospho

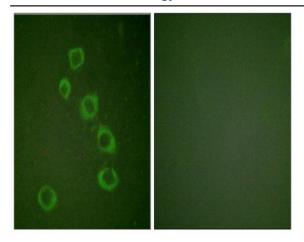
## **Products Images**



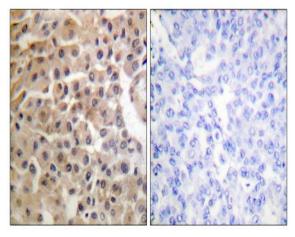
Western Blot analysis of various cells using Phospho-Neu (Y1221/Y1222) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HER2 (Phospho-Tyr1221+Tyr1222) Antibody



Immunofluorescence analysis of HuvEc cell, using HER2 (Phospho-Tyr1221+Tyr1222) Antibody. The lane on the right is blocked with the HER2 (Phospho-Tyr1221+Tyr1222) peptide.



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using HER2 (Phospho-Tyr1221+Tyr1222) Antibody. The picture on the right is blocked with the HER2 (Phospho-Tyr1221+Tyr1222) peptide.