

HER2 (phospho Thr686) Polyclonal Antibody

Catalog No: YP1175

Reactivity: Human; Mouse; Rat

Applications: 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: The antiserum was produced against synthesized peptide derived from human

HER2 around the phosphorylation site of Thr686. AA range:661-710

Specificity: Phospho-Neu (T686) Polyclonal Antibody detects endogenous levels of Neu

protein only when phosphorylated at T686.

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

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Source: Polyclonal, Rabbit, IgG

Dilution: IF 1:200 - 1:1000. ELISA: 1:5000. 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

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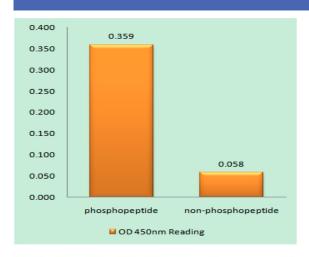


beta-1/KPNB1. Also detected in VPS35-positive endosome-to-TGN retrograde vesicles (PubMed:31138794). .; [Isoform 2]: Cytoplasm. Nucleus.; [Isoform 3]: Cytoplasm. Nucleus.

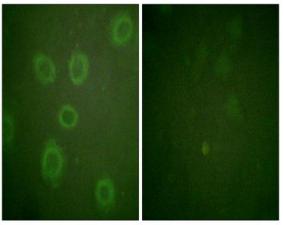
Expression:

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

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HER2 (Phospho-Thr686) Antibody



Immunofluorescence analysis of HUVEC cells, using HER2 (Phospho-Thr686) Antibody. The picture on the right is blocked with the phospho peptide.