



Neu (phospho Tyr1221/Y1222) Polyclonal Antibody

Catalog No	YP-Ab-12984
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;IP;ELISA
Gene Name	ERBB2
Protein Name	Receptor tyrosine-protein kinase erbB-2
Immunogen	The antiserum was produced against synthesized peptide derived from human HER2 around the phosphorylation site of Tyr1221/Tyr1222. AA range:1191-1240
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.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ERBB2; 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; CD antigen CD340
Observed Band	180kD
Cell Pathway	[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.
Tissue Specificity	Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.
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

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

matters needing attention

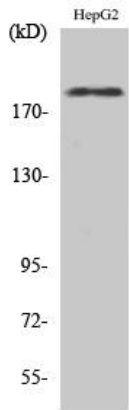
Avoid repeated freezing and thawing!

Usage suggestions

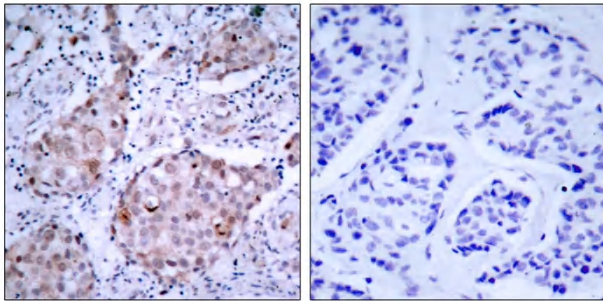
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



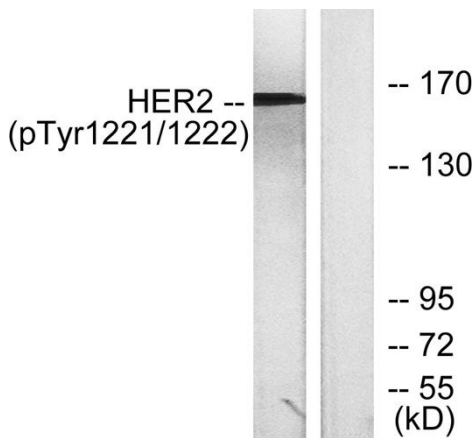
Products Images



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



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



Western blot analysis of lysates from SK-OV3 cells treated with EGF, using HER2 (Phospho-Tyr1221/Tyr1222) Antibody. The lane on the right is blocked with the phospho peptide.