HER2 (Phospho Tyr1221/1222) Rabbit pAb

CatalogNo: YP0177 Orthogonal Validated Comparable Abs

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,IP,ELISA

MW
- 180kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
IP 2-5 ug/mg lysate
ELISA 1:20000
IF 1:50-200

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human HER2 around the phosphorylation site of Tyr1221/Tyr1222. AA range:1191-1240

Specificity	This antibody detects endogenous levels of HER2 only when phosphorylated at Human:Y1221/1222, Mouse:Y1222/1222, Rat:Y1223/1224.and dually phosphorylated at two sites.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):LyyWD

Target Information

Gene name	ERBB2 HER2 MLN19 NEU NGL
Protein Name	Receptor tyrosine-protein kinase erbB-2

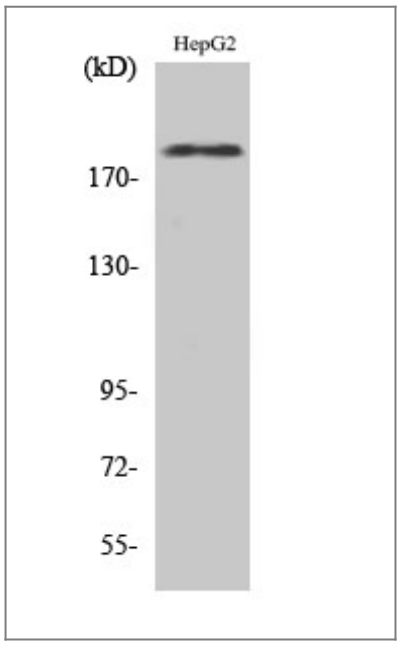
Organism	Gene ID	UniProt ID
Human	2064;	P04626;
Mouse	13866;	P70424;
Rat		P06494;

Cellular Localization	[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.

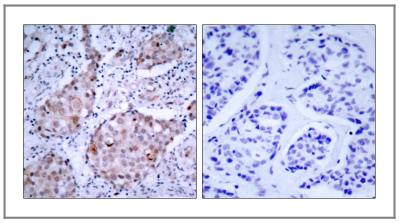
Function

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 visceral metastases. These typical features relate to the biology of the disease , which is a principal determinant of outcome. ,Function:Essential component of a neuregulin-receptor complex , although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Not activated by EGF , TGF-alpha and amphiregulin. ,online information:ERBB2 entry ,polymorphism:There are fours alleles due to the variations in positions 654 and 655. Allele B1 (Ile-654/Ile-655) has a frequency of 0.782; allele B2 (Ile-654/Val-655) has a frequency of 0.206; allele B3 (Val-654/Val-655) has a frequency of 0.012. ,PTM:Ligand-binding increases phosphorylation on tyrosine residues. ,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. ,similarity:Contains 1 protein kinase domain. ,subunit:Heterodimer with each of the other ERBB receptors (Potential) . Interacts with PRKCABP and PLXNB1. Part of a complex with EGFR and either PIK3C2A or PIK3C2B. May interact with PIK3C2B when phosphorylated on Tyr-1196. Interacts with MEMO when phosphorylated on Tyr-1248. Interacts with MUC1. Stimulation by heregulin (HRG) in breast cancer cell lines induces binding of MUC1 with gamma-catenin. ,

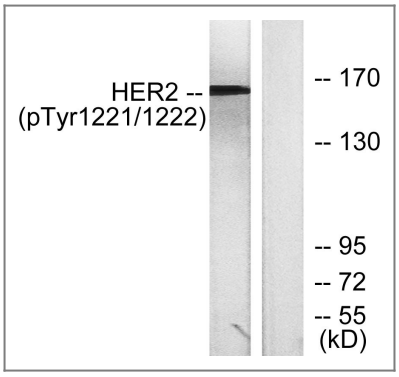
Validation Data



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.

Contact information

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Please scan the QR code to access additional product information:
HER2 (Phospho Tyr1221/1222) Rabbit pAb

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