

**HER2 (Phospho Thr686) rabbit pAb**

<b>Catalog No :</b>	YP1575
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	HER2
<b>Fields :</b>	>>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
<b>Gene Name :</b>	ERBB2 HER2 MLN19 NEU NGL
<b>Protein Name :</b>	HER2 (Phospho Thr686)
<b>Human Gene Id :</b>	2064
<b>Human Swiss Prot No :</b>	P04626
<b>Mouse Gene Id :</b>	13866
<b>Mouse Swiss Prot No :</b>	P70424
<b>Rat Swiss Prot No :</b>	P06494
<b>Immunogen :</b>	Synthesized peptide derived from human HER2 (Phospho Thr686)
<b>Specificity :</b>	This antibody detects endogenous levels of Human,Mouse,Rat HER2 (Phospho Thr686)
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:1000-2000 ELISA 1:5000-20000
<b>Purification :</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	180kD

**Background :** 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 four 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.,

**Function :** cell morphogenesis, cell morphogenesis involved in differentiation, regulation of action potential, liver development,negative regulation of immune system process, regulation of leukocyte activation, negative regulation of leukocyte activation, protein amino acid phosphorylation, phosphorus metabolic process, phosphate metabolic process, cellular ion homeostasis, cell motion, cell

surface receptor linked signal transduction, enzyme linked receptor protein signaling pathway, transmembrane receptor protein tyrosine kinase signaling pathway, intracellular signaling cascade, protein kinase cascade, ensheathment of neurons, axonogenesis, axon guidance, peripheral nervous system development, sensory organ development, heart development, muscle organ development, skeletal muscle tissue development, neuromuscular junction development, motor axon guidance, cell proliferation, positive regulation of

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**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.

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**Expression :**

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

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## Products Images