

Anti-Phospho-Neu (T686) antibody



Description	Rabbit polyclonal to Phospho-Neu (T686).
Model	STJ91335
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF
Immunogen	Synthesized peptide derived from human Neu around the phosphorylation site of T686.
Immunogen Region	630-710 aa
Gene ID	2064
Gene Symbol	ERBB2
Dilution range	IF 1:200-1:1000ELISA 1:5000
Specificity	Phospho-Neu (T686) Polyclonal Antibody detects endogenous levels of Neu protein only when phosphorylated at T686.
Tissue Specificity	Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	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

Molecular Weight	150 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:34300MIM:137800
Alternative Names	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
Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization. In the nucleus is involved in transcriptional regulation. Associates with the 5'-TCAAATTC-3' sequence in the PTGS2/COX-2 promoter and activates its transcription. Implicated in transcriptional activation of CDKN1A; the function involves STAT3 and SRC. Involved in the transcription of rRNA genes by RNA Pol I and enhances protein synthesis and cell growth.
Cellular Localization	Isoform 1: Cell membrane. Single-pass type I membrane protein. Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1.. Isoform 2: Cytoplasm. Nucleus.. Isoform 3: Cytoplasm. Nucleus.
Post-translational Modifications	Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases phosphorylation on tyrosine residues . Signaling via SEMA4C promotes phosphorylation at Tyr-1248 . Dephosphorylated by PTPN12 .