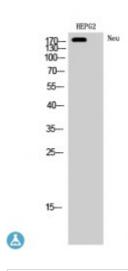


Anti-Neu antibody



Description Rabbit polyclonal to Neu.

Model STJ94416

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human Neu around the non-phosphorylation

site of Y1248.

Immunogen Region 1180-1260 aa

Gene ID <u>2064</u>

Gene Symbol <u>ERBB2</u>

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:5000

Specificity Neu Polyclonal Antibody detects endogenous levels of Neu protein.

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 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.

Modifications