

# Neu (phospho Tyr1221/Y1222) Polyclonal Antibody

Catalog # AP67109

#### **Product Information**

**Application** WB, IHC-P, IP **Primary Accession** P04626

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW137910

#### **Additional Information**

**Gene ID** 2064

Other Names 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

**Dilution** WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/20000. Not yet tested in

other applications. IHC-P~~N/A IP~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name ERBB2

Synonyms HER2, MLN19, NEU, NGL

**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.

**Cellular Location** Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle

membrane; Single-pass type I membrane protein. Note=Internalized from the

cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm.

Nucleus.

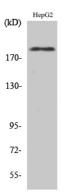
**Tissue Location** Expressed in a variety of tumor tissues including primary breast tumors and

tumors from small bowel, esophagus, kidney and mouth.

## **Background**

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.

### **Images**



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.