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Phospho-rat ERBB2(T1168) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3860a

Product Information

Application	DB, E
Primary Accession	P06494
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30647
Calculated MW	138832

Additional Information

Other Names	Receptor tyrosine-protein kinase erbB-2, Epidermal growth factor receptor-related protein, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, p185erbB2, p185neu, CD340, Erbb2, Neu
Target/Specificity	This rat ERBB2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T1168 of rat ERBB2.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-rat ERBB2(T1168) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

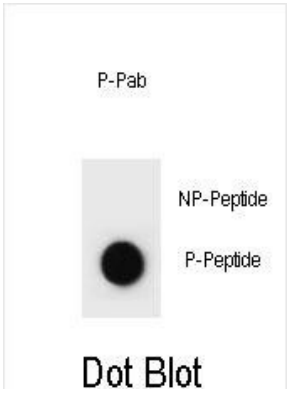
Name	Erbb2
Synonyms	Neu
Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand 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 (By similarity). Interacts (preferentially with the tyrosine phosphorylated form) with CPNE3; this interaction occurs at the cell membrane and is increased in a growth factor heregulin-dependent manner (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P04626}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P04626} Cell projection, ruffle membrane {ECO:0000250|UniProtKB:P04626}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P04626} Early endosome {ECO:0000250|UniProtKB:P04626}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P04626}. Nucleus {ECO:0000250|UniProtKB:P04626}. Note=Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1. Also detected in endosome-to-TGN retrograde vesicles. Internalized from the cell membrane in response to EGF stimulation. {ECO:0000250|UniProtKB:P04626}

Background

Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Binds to the 5'-TCAAATTC-3' sequence in the MT-CO2 promoter and activates its transcription (By similarity).

Images



Dot blot analysis of rat ERBB2 Antibody (Phospho T1168) Phospho-specific Pab (Cat. #AP3860a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.