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Phospho-ERBB3(Y1289) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3708a

Product Information

Application	DB, WB, E
Primary Accession	P21860
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	148098

Additional Information

Gene ID	2065
Other Names	Receptor tyrosine-protein kinase erbB-3, Proto-oncogene-like protein c-ErbB-3, Tyrosine kinase-type cell surface receptor HER3, ERBB3, HER3
Target/Specificity	This ERBB3 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y1289 of human ERBB3.
Dilution	DB~~1:500 WB~~1:1000 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-ERBB3(Y1289) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ERBB3
Synonyms	HER3
Function	Tyrosine-protein kinase that plays an essential role as cell surface receptor for neuregulins. Binds to neuregulin-1 (NRG1) and is activated by it; ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase (PubMed:20682778). May also be activated by CSPG5 (PubMed:15358134).

	Involved in the regulation of myeloid cell differentiation (PubMed:27416908).
Cellular Location	[Isoform 1]: Cell membrane; Single-pass type I membrane protein
Tissue Location	Epithelial tissues and brain.

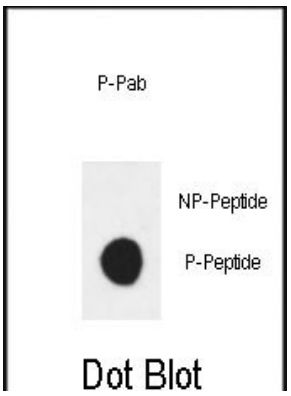
Background

This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form.

References

Huang, X., et al. Cancer Res. 70(3):1204-1214(2010)
Pierce, B.L., et al. Hum. Hered. 69(3):193-201(2010)
Li, D., et al. World J. Biol. Psychiatry 10 (4 PT 2), 595-598 (2009)
Carr, E.J., et al. BMC Med. Genet. 10, 121 (2009)
Zhang, Y., et al. BMC Cell Biol. 10, 78 (2009)

Images



Dot blot analysis of anti-Phospho-ERBB3 (Tyr1289) Antibody Phospho-specific Pab (Cat. #AP3708a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.