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ERBB3 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7630a

Specification

ERBB3 Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P21860
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**24-55**

ERBB3 Antibody (N-term) - 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 peptide between 24-55 amino acids from the N-terminal region of human ERBB3.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
ERBB3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ERBB3 Antibody (N-term) - 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

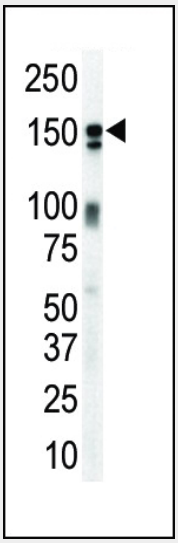
Tissue Location
Epithelial tissues and brain.

ERBB3 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

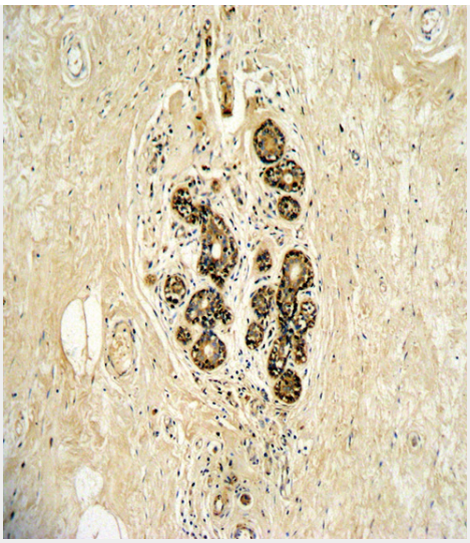
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ERBB3 Antibody (N-term) - Images

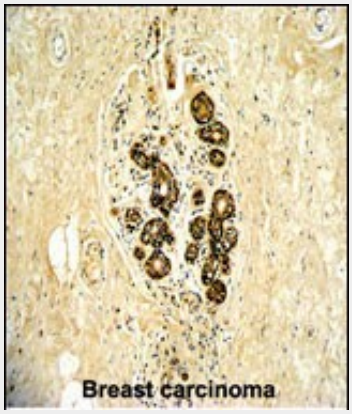


Western blot analysis of anti-ErbB3 Pab (Cat. #AP7630a) in mouse brain lysate. ErbB3 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

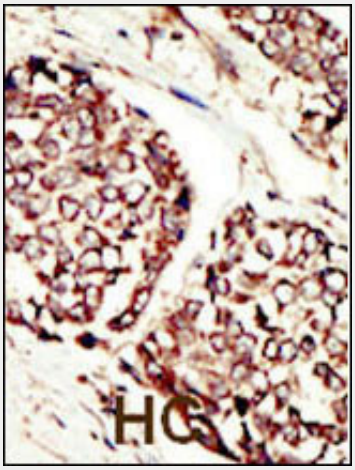
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Formalin-fixed and paraffin-embedded human breast carcinoma with ErbB3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

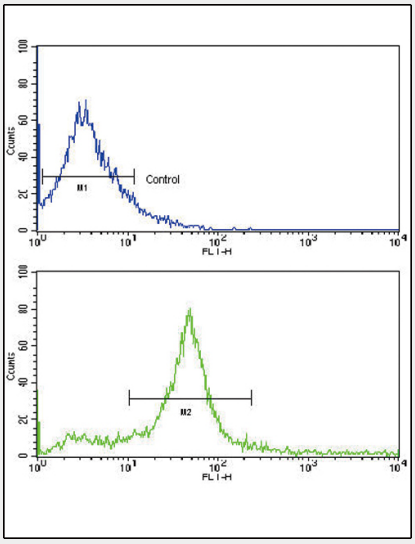


Formalin-fixed and paraffin-embedded human breast carcinoma with ErbB3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody,

which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Flow cytometric analysis of 293 cells using ErbB3 Antibody (N-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ERBB3 Antibody (N-term) - Background

ErbB3, a member of the EGF receptor family, binds and is activated by neuregulins and NTAK. It potentially forms a heterodimer with each of the other ERBB receptors. This protein is predominantly expressed in epithelial tissues and brain. The cytoplasmic part of the receptor may interact with the SH2 or SH3 domains of many signal-transducing proteins. Ligand-binding may increase phosphorylation on tyrosine residues and promote its association with the p85 subunit of phosphatidylinositol 3-kinase ErbB3 is overexpressed in a subset of human mammary tumors.

ERBB3 Antibody (N-term) - References

Katoh, M., et al., Biochem. Biophys. Res. Commun. 192(3):1189-1197 (1993). Plowman, G.D., et al., Proc. Natl. Acad. Sci. U.S.A. 87(13):4905-4909 (1990). Kraus, M.H., et al., Proc. Natl. Acad. Sci. U.S.A. 86(23):9193-9197 (1989).

ERBB3 Antibody (N-term) - Citations

- High incidence of ErbB3, ErbB4, and MET expression in ovarian cancer.
- Charcot-Marie-Tooth disease-linked protein SIMPLE functions with the ESCRT machinery in endosomal trafficking.
- Preventive effects of heregulin-beta1 on macrophage foam cell formation and atherosclerosis.
- Neuregulin1-induced cell migration is impaired in schizophrenia: association with neuregulin1 and catechol-o-methyltransferase gene polymorphisms.