

Summary

Production Name	ErbB-3 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ERBB3
Alternative Names	ERBB3; HER3; Receptor tyrosine-protein kinase erbB-3; Proto-oncogene-like protein c-ErbB-3; Tyrosine kinase-type cell surface receptor HER3
Gene ID	2065.0
SwissProt ID	P21860.The antiserum was produced against synthesized peptide derived from human HER3. AA range:1-50

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000..
Molecular Weight	148kD

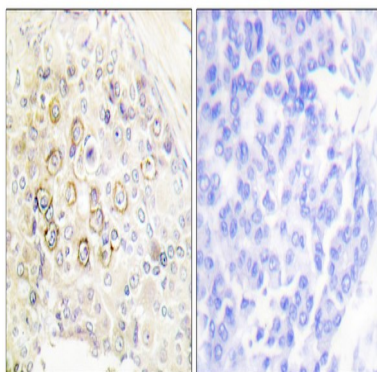
Background

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 catalytic activity: $ATP + a [protein]\text{-L-tyrosine} = ADP + a [protein]\text{-L-tyrosine phosphate}$.
.,disease:Defects in ERBB3 are the cause of lethal congenital contracture syndrome type 2 (LCCS2) [MIM:607598]; also called Israeli Bedouin multiple contracture syndrome type A. LCCS2 is an autosomal recessive neurogenic form of a neonatally lethal arthrogryposis that is associated with atrophy of the anterior horn of the spinal cord. The LCCS2 syndrome is characterized by multiple joint contractures, anterior horn atrophy in the spinal cord, and a unique feature of a markedly distended urinary bladder. The phenotype suggests a spinal cord neuropathic etiology.
.,disease:Overexpressed in a subset of human mammary tumors.
.,domain:The cytoplasmic part of the receptor may interact with the SH2 or SH3 domains of many signal-transducing proteins.
.,function:Binds and is activated by neuregulins and NTAK.
.,PTM:Ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase.
.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.
.,similarity:Contains 1 protein kinase domain.
.,subunit:Heterodimer with each of the other ERBB receptors (Potential). Interacts with CSPG5, PA2G4 and MUC1.
.,tissue specificity:Epithelial tissues and brain.

Research Area

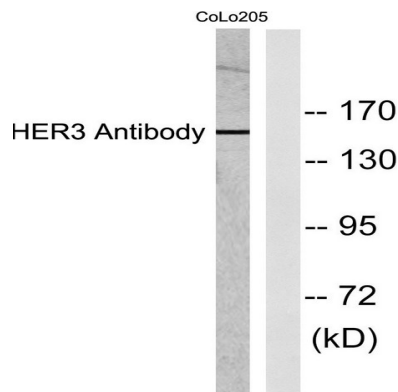
ErbB_HER;Calcium;Endocytosis;

Image Data

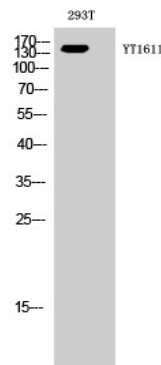


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using HER3 Antibody. The picture on the right is blocked with the synthesized peptide.

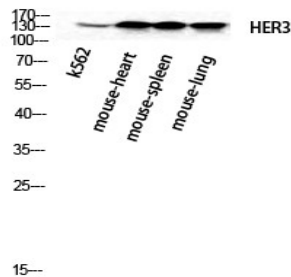
Product Name: ErbB-3 Rabbit Polyclonal Antibody
Catalog #: APRab10573



Western blot analysis of lysates from COLO205 cells, using HER3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of 293T cells using ErbB-3 Polyclonal Antibody diluted at 1 : 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA) .



Western Blot analysis of k562 mouse-heart mouse-spleen mouse-lung cells using ErbB-3 Polyclonal Antibody diluted at 1 : 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA) .

Note

For research use only.