

Datasheet for ABIN3044100  
**anti-ERBB4 antibody (N-Term)**



[Go to Product page](#)

3 Images

## Overview

Quantity:	100 µg
Target:	ERBB4
Binding Specificity:	AA 35-51, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ERBB4 antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Purpose:	Anti-ErbB 4/ERBB4 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human ErbB 4, identical to the related rat and mouse sequences.
Sequence:	KLSSLSGLEQ QYRALRK
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-ErbB 4/ERBB4 Antibody (ABIN3044100). Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: ERBB4

Alternative Name: ERBB4 ([ERBB4 Products](#))

Background: Synonyms: Receptor tyrosine-protein kinase erbB-4;2.7.10.1;Proto-oncogene-like protein c-ErbB-4;Tyrosine kinase-type cell surface receptor HER4;p180erbB4;ERBB4 intracellular domain;4ICD;E4ICD;s80HER4;ERBB4;HER4;

Tissue Specificity: Expressed at highest levels in brain, heart, kidney, in addition to skeletal muscle, parathyroid, cerebellum, pituitary, spleen, testis and breast. Lower levels in thymus, lung, salivary gland, and pancreas. Isoform JM-A CYT-1 and isoform JM-B CYT-1 are expressed in cerebellum, but only the isoform JM-B is expressed in the heart. .

Background: ERBB4 (V-erb-b2 avian erythroblastic leukemia viral oncogene homolog 4) also known as ONCOGENE ERBB4 or HER4, is an enzyme that in humans is encoded by the ERBB4 gene. The HER4/ERBB4 gene is a member of the type I receptor tyrosine kinase subfamily that includes EGFR, ERBB2 and ERBB3. The ERBB4 gene is mapped on 2q34. ERBB4 is a single-pass type I transmembrane protein with multiple furin-like cysteine rich domains, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domainbinding motif. Huang et al. (2000) reported that ERBB4 is enriched in the postsynaptic density and associates with PSD95. ERBB4 is a transmembrane receptor tyrosine kinase that regulates cell proliferation and differentiation. After binding its ligand, heregulin, or activation of protein kinase C by TPA, the ERBB4 ectodomain is cleaved by a metalloprotease. Ni et al. (2001)concluded that gamma-secretase cleavage of ERBB4 may represent another mechanism for receptor tyrosine kinase-mediated signaling.

Sequence Similarities: Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

Molecular Weight: 180 kDa

UniProt: [Q15303](#)

Pathways: [RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#)

## Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat

## Application Details

1. Huang, Y. Z., Won, S., Ali, D. W., Wang, Q., Tanowitz, M., Du, Q. S., Pelkey, K. A., Yang, D. J., Xiong, W. C., Salter, M. W., Mei, L. Regulation of neuregulin signaling by PSD-95 interacting with ErbB4 at CNS synapses. Neuron 26: 443-455, 2000. 2. Ni, C.-Y., Murphy, M. P., Golde, T. E., Carpenter, G. Gamma-secretase cleavage and nuclear localization of ErbB-4 receptor tyrosine kinase. Science 294: 2179-2181, 2001. 3. Sardi, S. P., Murtie, J., Koirala, S., Patten, B. A., Corfas, G. Presenilin-dependent ErbB4 nuclear signaling regulates the timing of astrogenesis in the developing brain. Cell 127: 185-197, 2006.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Thimerosal (Merthiolate), Sodium azide

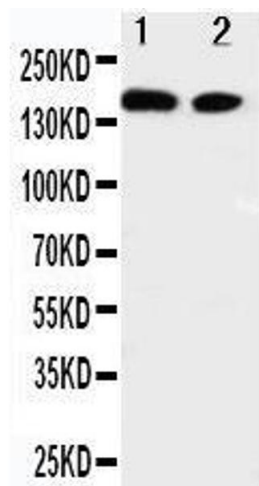
Precaution of Use: This product contains Thimerosal (Merthiolate) and Sodium azide: POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C, -20 °C

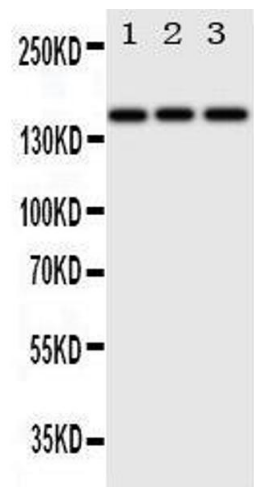
Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Expiry Date: 12 months



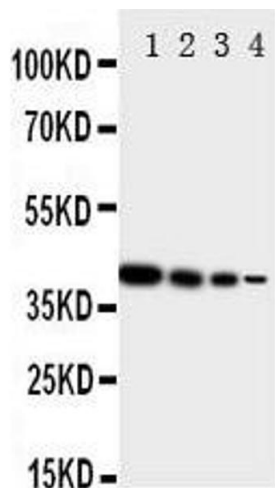
Western Blotting

**Image 1.** Anti-ErbB 4 antibody, Western blotting Lane 1: A549 Cell Lysate Lane 2: HELA Cell Lysate



Western Blotting

**Image 2.** Anti-ErbB 4 antibody, Western blotting Lane 1: HELA Cell Lysate Lane 2: U87 Cell Lysate Lane 3: NEURO Cell Lysate



Western Blotting

**Image 3.** Lane 4: Recombinant Human ERRB4 Protein 1.25ng