

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Erbin in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse ErbB2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Erbin Lys496-Thr687 Accession # Q96RT1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

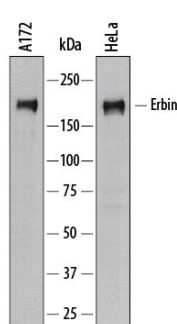
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

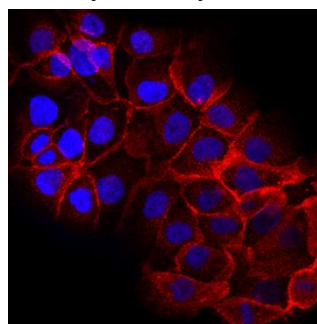
Western Blot



Detection of Human Erbin by Western Blot.

Western blot shows lysates of A172 human glioblastoma cell line and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 0.2 µg/mL of Sheep Anti-Human Erbin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7866) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Erbin at approximately 180 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Erbin in DU145 Human Cell Line. Erbin was detected in immersion fixed DU145 human prostate carcinoma cell line using Sheep Anti-Human Erbin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7866) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

ErbB2IP (ErbB2 Interacting Protein/Erbin; also Densin-180-like protein and LAP2) is both a nuclear and cytoplasmic 175-180 kDa member of the LAP (LRR And PDZ) family of proteins. It is widely expressed, and found in cell types as diverse as intestinal columnar epithelium, neurons, keratinocytes and skeletal plus cardiac muscle cells. Functionally, ErbB2IP interacts with multiple proteins through a PZD-mediated interaction. Partners include ErbB2, δ-catenin, PSD-95 and ARVCF. The ErbB2 interaction localizes this receptor to the basolateral membrane of epithelium, while the δ-catenin interaction impacts dendritic arborization, possibly through involvement with type 1 or 2 catenin(s) and the F-actin cytoskeleton. Finally, ErbB2IP/Erbin is suggested to play a role in maintaining the G1 phase of the cell cycle. Human ErbB2IP is 1412 amino acids (aa) in length. It contains 17 LRRs (Leu-rich repeats) (aa 23-413) followed by one PDZ domain (aa 1321-1410). There are more than 10 utilized Tyr, and 15 utilized Ser/Thr phosphorylation sites. A series of deletions over aa 1211-1377 generate at least six known splice variants. All show a deletion of aa 1212-1252, and at least one additional 10-41 aa deletion C-terminal to the common deletion. Over aa 496-687, human and mouse ErbB2IP share 88% aa sequence identity.