

ERBIN (10D2): sc-293468

BACKGROUND

The ErbB-2 receptor tyrosine kinase evolved as a shared coreceptor of all ErbB-specific growth factors and acts as a coordinator of a variety of biological signaling networks. ErbB-2 couples ErbB receptors to the migration/invasion machinery of carcinoma cells by employing adaptor proteins, such as p130CAS and c-CrkII, which regulate the Actin-myosin cytoskeleton of migratory cells. ErbB-2 is expressed in basal cells of squamous epithelia and is important in the morphogenesis and oncogenesis of secretory epithelia. In epithelia, ErbB-2 employs the adaptor protein ERBIN (ErbB-2 interacting protein), which functions in the localization and signaling of ErbB-2. ERBIN contains a PDZ domain that directly and specifically interacts with ErbB-2, causing ERBIN and ErbB-2 to colocalize to the lateral membrane of intestinal epithelial cells. ERBIN provides further evidence to support the claim that the tumorigenic action of ErbB-2 may be attributed to its ability to act as a shared signaling subunit, rather than functioning as a distinct receptor.

REFERENCES

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3. Klapper, L.N., Glathe, S., Vaisman, N., Hynes, N.E., Andrews, G.C., Sela, M. and Yarden, Y. 1999. The ErbB-2/HER2 oncoprotein of human carcinomas may function solely as a shared coreceptor for multiple stroma-derived growth factors. *Proc. Natl. Acad. Sci. USA* 96: 4995-5000.
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5. Borg, J.P., Marchetto, S., Le Bivic, A., Ollendorff, V., Jaulin-Bastard, F., Saito, H., Fournier, E., Adelaide, J., Margolis, B. and Birnbaum, D. 2000. ERBIN: a basolateral PDZ protein that interacts with the mammalian ERBB2/HER2 receptor. *Nat. Cell Biol.* 2: 407-414.

CHROMOSOMAL LOCATION

Genetic locus: ERBIN (human) mapping to 5q12.3; Erbin (mouse) mapping to 13 D1.

SOURCE

ERBIN (10D2) is a mouse monoclonal antibody raised against amino acids 1272-1371 representing partial length ERBIN of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

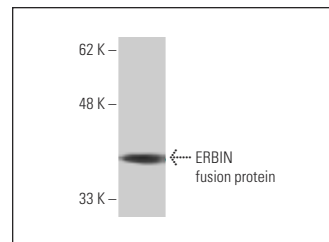
ERBIN (10D2) is recommended for detection of ERBIN of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ERBIN siRNA (h): sc-40541, ERBiN siRNA (m): sc-40542, ERBIN shRNA Plasmid (h): sc-40541-SH, ERBiN shRNA Plasmid (m): sc-40542-SH, ERBIN shRNA (h) Lentiviral Particles: sc-40541-V and ERBiN shRNA (m) Lentiviral Particles: sc-40542-V.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ERBIN (10D2): sc-293468. Western blot analysis of human recombinant ERBIN fusion protein.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.