SANTA CRUZ BIOTECHNOLOGY, INC.

ERBIN (D-16): sc-13248



BACKGROUND

The ErbB-2 receptor tyrosine kinase evolved as a shared co-receptor 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-Crk II, which regulate the Actin-Myosin cytoskeleton of migratory cells. ErbB-2 is expressed in basal cells of sqamous 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 co-localize 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 acts as a shared signaling subunit, rather than functioning as a distinct receptor.

CHROMOSOMAL LOCATION

Genetic locus: ERBB2IP (human) mapping to 5q12.3; Erbb2ip (mouse) mapping to 13 D1.

SOURCE

ERBIN (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ERBIN of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13248 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-13248 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ERBIN (D-16) 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 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ERBIN (D-16) is also recommended for detection of ERBIN in additional species, including equine, canine, bovine and avian.

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.

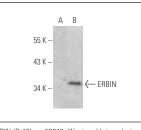
ERBIN (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

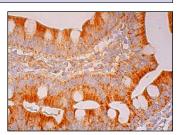
Positive Controls: mouse ERBIN transfected CHO whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





ERBIN (D-16): sc-13248. Western blot analysis of ERBIN expression in non-transfected CHO ($\bf A$) and mouse ERBIN transfected CHO ($\bf B$) whole cell lysates

ERBIN (D-16): sc-13248. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **ERBIN (10D2): sc-293468**, our highly recommended monoclonal alternative to ERBIN (D-16).