SANTA CRUZ BIOTECHNOLOGY, INC.

Scrib (C-6): sc-55543

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Drosophila melanogaster genes, which are categorized based on the type of protein for which they encode, represent six major classifications, including intracellular signaling proteins, transmembrane proteins, RNA binding proteins, secreted factors, transcription regulators (basic helix-loop-helix, homeodomain containing, zinc finger containing and chromatin associated) and other functional proteins. Morphogenesis and cell differentiation in *Drosophila* requires accurate control of cell division. Discs large (DLG), Scribble (Scrib) and Lethal giant larvae (LGL) tumor suppressor proteins regulate multiple aspects of neuroblast asymmetric cell division. DLG/Scrib/LGL proteins show apical cortical enrichment at prophase/metaphase and have a uniform cortical distribution. Mutations in the genes encoding multi-PDZ (PSD-95, discs-large and ZO-1) and the leucine-rich-repeat protein Scrib cause aberrant cell shapes and the loss of monolayer organization of embryonic epithelia. The human homolog, hScrib, is intracellularly localized to the vertebrate tight junction, which functions to correctly place adherens junctions. The PDZ domains of Scrib are predicted to bind to the consensus S/TXV at the C-terminus of proteins. PDZ domain proteins have been implicated at several different sites of the protein trafficking pathway, suggesting that Scrib is required for the localization of several epithelial determinants.

CHROMOSOMAL LOCATION

Genetic locus: SCRIB (human) mapping to 8q24.3.

SOURCE

Scrib (C-6) is a mouse monoclonal antibody raised against amino acids 1331-1630 (deletion 1444-1504) mapping at the C-terminus of Scrib of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Scrib (C-6) is available conjugated to agarose (sc-55543 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55543 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-55543 PE), fluorescein (sc-55543 FITC), Alexa Fluor® 488 (sc-55543 AF488), Alexa Fluor® 546 (sc-55543 AF546), Alexa Fluor® 594 (sc-55543 AF594) or Alexa Fluor® 647 (sc-55543 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-55543 AF680) or Alexa Fluor® 790 (sc-55543 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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.

APPLICATIONS

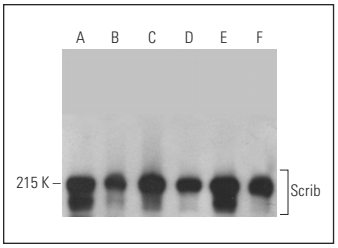
Scrib (C-6) is recommended for detection of Scrib of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (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).

Suitable for use as control antibody for Scrib siRNA (h): sc-36466, Scrib shRNA Plasmid (h): sc-36466-SH and Scrib shRNA (h) Lentiviral Particles: sc-36466-V.

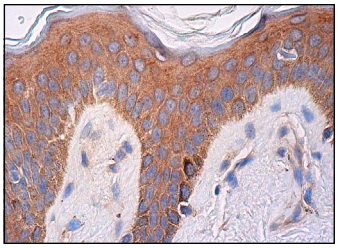
Molecular Weight of Scrib: 210 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, T-47D cell lysate: sc-2293 or MCF7 whole cell lysate: sc-2206.

DATA



Scrib (C-6) HRP: sc-55543 HRP. Direct western blot analysis of Scrib expression in T-47D (**A**), JAR (**B**), HeLa (**C**), Jurkat (**D**), MCF7 (**E**) and Hep G2 (**F**) whole cell lysates.



Scrib (C-6): sc-55543. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of epidermal cells.

SELECT PRODUCT CITATIONS

1. Carvalho, G., et al. 2011. Participation of the cell polarity protein PALS1 to T-cell receptor-mediated NFκB activation. PLoS ONE 6: e18159.
2. Abrahamsen, G., et al. 2018. Polarity of $CD4^+$ T cells towards the antigen presenting cell is regulated by the Lck adapter TSAd. Sci. Rep. 8: 13319.
3. Abedrabbo, M. and Ravid, S. 2020. Scribble, Lgl1, and myosin II form a complex *in vivo* to promote directed cell migration. Mol. Biol. Cell 31: 2234-2248.
4. Lulic, L., et al. 2021. Human DLG1 and Scrib are distinctly regulated independently of HPV-16 during the progression of oropharyngeal squamous cell carcinomas: a preliminary analysis. Cancers 13: 4461.
5. Zhang, Z., et al. 2022. Cdc42 controlled apical-basal polarity regulates intestinal stem cell to transit amplifying cell fate transition via YAP-EGF-mTOR signaling. Cell Rep. 38: 110009.
6. Abedrabbo, M., et al. 2023. Scribble, Lgl1, and myosin IIA interact with α-/β-catenin to maintain epithelial junction integrity. Cell Adh. Migr. 17: 1-23.

RESEARCH USE

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