SANTA CRUZ BIOTECHNOLOGY, INC.

Scrib (D-2): sc-374139

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; Scrib (mouse) mapping to 15 D3.

SOURCE

Scrib (D-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1489-1525 near the C-terminus of Scrib of human origin.

PRODUCT

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

Scrib (D-2) is available conjugated to agarose (sc-374139 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374139 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374139 PE), fluorescein (sc-374139 FITC), Alexa Fluor® 488 (sc-374139 AF488), Alexa Fluor® 546 (sc-374139 AF546), Alexa Fluor® 594 (sc-374139 AF594) or Alexa Fluor® 647 (sc-374139 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374139 AF680) or Alexa Fluor® 790 (sc-374139 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374139 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer 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.

APPLICATIONS

Scrib (D-2) is recommended for detection of Scrib of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

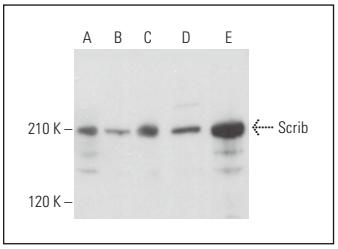
Scrib (D-2) is also recommended for detection of Scrib in additional species, including canine.

Suitable for use as control antibody for Scrib siRNA (h): sc-36466, Scrib siRNA (m): sc-36467, Scrib shRNA Plasmid (h): sc-36466-SH, Scrib shRNA Plasmid (m): sc-36467-SH, Scrib shRNA (h) Lentiviral Particles: sc-36466-V and Scrib shRNA (m) Lentiviral Particles: sc-36467-V.

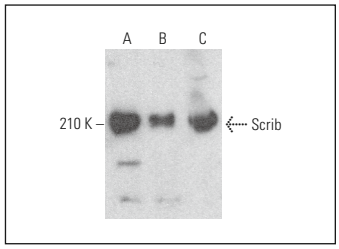
Molecular Weight of Scrib: 210 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or Hep G2 cell lysate: sc-2227.

DATA



Scrib (D-2): sc-374139. Western blot analysis of Scrib expression in Hep G2 (**A**), JAR (**B**), PC-3 (**C**), A2058 (**D**) and T-47D (**E**) whole cell lysates.



Scrib (D-2): sc-374139. Western blot analysis of Scrib expression in HeLa (**A**), Hep G2 (**B**) and MCF7 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Scully, D., et al. 2019. Platelet releasate promotes skeletal myogenesis by increasing muscle stem cell commitment to differentiation and accelerates muscle regeneration following acute injury. Acta Physiol. 225: e13207.
2. Scully, D., et al. 2020. Optimising platelet secretomes to deliver robust tissue-specific regeneration. J. Tissue Eng. Regen. Med. 14: 82-98.
3. Liu, S., et al. 2020. NC1-peptide regulates spermatogenesis through changes in cytoskeletal organization mediated by EB1. FASEB J. 34: 3105-3128.
4. Messa, L., et al. 2021. The dimeric form of HPV16 E6 is crucial to drive YAP/TAZ upregulation through the targeting of hScrib. Cancers 13: 4083.
5. Almeida, S.M., et al. 2023. An interaction between OTULIN and SCRIB uncovers roles for linear ubiquitination in planar cell polarity. Dis. Model. Mech. 16: dmm049762.

RESEARCH USE

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