Scrib (C-20): sc-11049



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 LOCATIONS

Genetic locus: SCRIB (human) mapping to 8g24.3.

SOURCE

Scrib (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Scrib of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11049 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Scrib (C-20) is recommended for detection of Scrib of 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

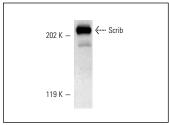
RESEARCH USE

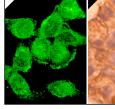
For research use only, not for use in diagnostic procedures.

STORAGE

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

DATA





Scrib (C-20): sc-11049. Western blot analysis of Scrib expression in HeLa whole cell lysate.

Scrib (C-20): sc-11049. Immunofluorescence staining of methanol-fixed HeLa cells showing tight junction membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tumor showing tight junction localization (B).

SELECT PRODUCT CITATIONS

- Dow, L.E., et al. 2003. hScrib is a functional homologue of the *Drosophila* tumour suppressor Scribble. Oncogene 22: 9225-9230.
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- 3. Déliot, N., et al. 2009. Biochemical studies and molecular dynamics simulations of Smad3-Erbin interaction identify a non-classical Erbin PDZ binding. Biochem. Biophys. Res. Commun. 378: 360-365.
- 4. Phua, D.C., et al. 2009. Vimentin regulates scribble activity by protecting it from proteasomal degradation. Mol. Biol. Cell 20: 2841-2855.
- Moreau, M.M., et al. 2010. The planar polarity protein Scribble1 is essential for neuronal plasticity and brain function. J. Neurosci. 30: 9738-9752.
- Namdarian, B., et al. 2011. Loss of APKC expression independently predicts tumor recurrence in superficial bladder cancers. Urol. Oncol. E-Published.
- 7. Kranjec, C., et al. 2011. A systematic analysis of human papillomavirus (HPV) E6 PDZ substrates identifies MAGI-1 as a major target of HPV type 16 (HPV-16) and HPV-18 whose loss accompanies disruption of tight junctions. J. Virol. 85: 1757-1764.
- 8. Hartleben, B., et al. 2012. Role of the polarity protein Scribble for podocyte differentiation and maintenance. PLoS ONE 7: e36705.



Try Scrib (D-2): sc-374139 or Scrib (C-6): sc-55543, our highly recommended monoclonal alternatives to Scrib (C-20).