

Scrib (K-21): sc-11048

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 (K-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Scrib of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11048 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Scrib (K-21) is recommended for detection of Scrib 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)], 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).

Scrib (K-21) is also recommended for detection of Scrib in additional species, including equine and canine.

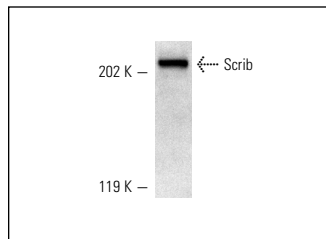
Suitable for use as control antibody for Scrib siRNA (h): sc-36466, Scrib siRNA (m): sc-36467, Scrib shRNA Plasmid (h): sc-36466-SH, Scrib shRNA Plasmid (m): sc-36467-SH, Scrib shRNA (h) Lentiviral Particles: sc-36466-V and Scrib shRNA (m) Lentiviral Particles: sc-36467-V.

Molecular Weight of Scrib: 210 kDa.

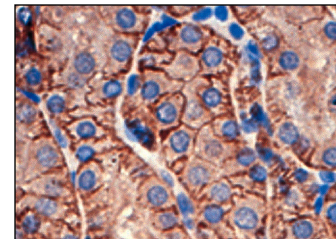
STORAGE

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

DATA



Scrib (K-21): sc-11048. Western blot analysis of Scrib expression in HeLa whole cell lysate.



Scrib (K-21): sc-11048. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse kidney tissue showing tight junction localization.

SELECT PRODUCT CITATIONS

- Audebert, S., et al. 2004. Mammalian Scribble forms a tight complex with the βPIX exchange factor. *Curr. Biol.* 14: 987-995.
- Lahuna, O., et al. 2005. Thyrotropin receptor trafficking relies on the hScrib-βPIX-GIT1-ARF6 pathway. *EMBO J.* 24: 1364-1374.
- Arpin-André, C., et al. 2007. The PDZ domain-binding motif of the human T cell leukemia virus type 1 tax protein induces mislocalization of the tumor suppressor hScrib in T cells. *J. Biol. Chem.* 282: 33132-33141.
- Okajima, M., et al. 2008. Human T-cell leukemia virus type 1 Tax induces an aberrant clustering of the tumor suppressor Scribble through the PDZ domain-binding motif dependent and independent interaction. *Virus Genes* 37: 231-240.
- Lozovatsky, L., et al. 2009. CASK deletion in intestinal epithelia causes mislocalization of LIN7C and the DLG1/Scrib polarity complex without affecting cell polarity. *Mol. Biol. Cell* 20: 4489-4499.
- Yang, J.Q., et al. 2010. NBR1 is a new PB1 signalling adapter in Th2 differentiation and allergic airway inflammation *in vivo*. *EMBO J.* 29: 3421-3433.
- Moreau, M.M., et al. 2010. The planar polarity protein Scribble1 is essential for neuronal plasticity and brain function. *J. Neurosci.* 30: 9738-9752.

RESEARCH USE

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



Try **Scrib (D-2): sc-374139** or **Scrib (C-6): sc-55543**, our highly recommended monoclonal alternatives to Scrib (K-21).