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SHROOM3 Antibody
Catalog # ASC11581

Specification

SHROOM3 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q8TF72
Other Accession	NP_065910, 203098098
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**220 kDa KDa**
Application Notes	**SHROOM3 antibody can be used for detection of SHROOM3 by Western blot at 1 - 2 µg/mL.**

SHROOM3 Antibody - Additional Information

Gene ID **57619**

Target/Specificity
SHROOM3; SHROOM3 antibody is human specific. At least four isoforms of SHROOM3 are known to exist; this antibody will detect all four isoforms. SHROOM3 antibody is predicted to not cross-react with other SHROOM family members.

Reconstitution & Storage
SHROOM3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
SHROOM3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SHROOM3 Antibody - Protein Information

Name SHROOM3

Synonyms KIAA1481, SHRML

Function
Controls cell shape changes in the neuroepithelium during neural tube closure. Induces apical constriction in epithelial cells by promoting the apical accumulation of F-actin and myosin II, and probably by bundling stress fibers (By similarity). Induces apicobasal cell elongation by redistributing gamma-tubulin and directing the assembly of robust apicobasal microtubule arrays (By similarity).

Cellular Location

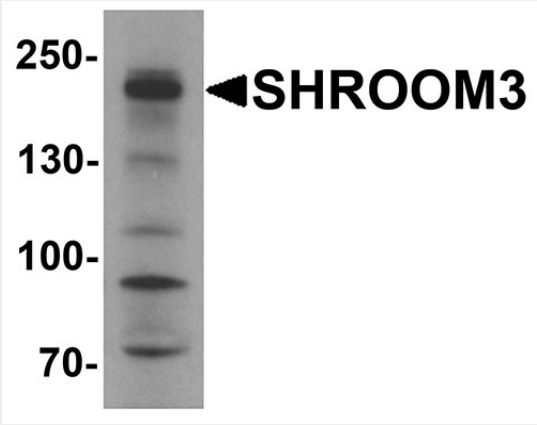
Cell junction, adherens junction {ECO:0000250|UniProtKB:Q9QXN0}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9QXN0}. Apical cell membrane {ECO:0000250|UniProtKB:Q9QXN0}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9QXN0}. Note=Colocalizes with F-actin in stress fibers and adherens junctions. {ECO:0000250|UniProtKB:Q9QXN0}

SHROOM3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SHROOM3 Antibody - Images



Western blot analysis of SHROOM3 in SK-N-SH cell lysate with SHROOM3 antibody at 1 µg/mL.

SHROOM3 Antibody - Background

SHROOM3 Antibody: SHROOM family members play diverse roles in the development of the nervous system and other tissues. SHROOM3 is an actin-binding protein is a regulator of the microtubule cytoskeleton during epithelial morphogenesis and is sufficient and necessary to induce a redistribution of the microtubule regulator gamma-tubulin. It is necessary for both apiscobasal cell elongation and apical constriction in the neural epithelium. SHROOM3 has also been shown to be essential for cell shape changes and morphogenesis in the developing vertebrate gut, with its transcription relying on the Pitx1 transcription factor.

SHROOM3 Antibody - References

Lee C, Le MP, and Wallingford JB. The shroom family proteins play broad roles in the morphogenesis of thickened epithelial sheets. Dev. Dyn. 2009; 238:1480-91
Lee C, Scherr HM, and Wallingford JB. Shroom family proteins regulate gamma-tubulin distribution and microtubule architecture during epithelial cell shape change. Development 2007; 134:1431-41.
Haigo SL, Hildebrand JD, Harland RM, et al. Shroom induces apical constriction and is required for hingepoint formation during neural tube closure. Curr. Biol. 2003; 13:2125-37

Chung MI, Nascone-Yoder NM, Grover SA, et al. Direct activation of Shroom3 transcription by Pitx proteins drives epithelial morphogenesis in the developing gut. Development 2010; 137:1339-49.