

# SHROOM1 (N-16): sc-165486

## BACKGROUND

SHROOM1, also known as APXL2 (apical protein 2), is an 852 amino acid protein that contains one ASD1 domain and one ASD2 domain. Localized to both the cytoplasm and the cytoskeleton, SHROOM1 interacts with Actin and is thought to be involved in microtubule assembly during cell elongation, possibly playing a role in the development of the nervous system. Multiple isoforms of SHROOM1 exist due to alternative splicing events. The gene encoding SHROOM1 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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2. Nagase, T., et al. 2001. Prediction of the coding sequences of unidentified human genes. XXII. The complete sequences of 50 new cDNA clones which code for large proteins. *DNA Res.* 8: 319-327.
3. Hildebrand, J.D. 2005. Shroom regulates epithelial cell shape via the apical positioning of an actomyosin network. *J. Cell Sci.* 118: 5191-5203.
4. Hagens, O., et al. 2006. A new standard nomenclature for proteins related to Apx and Shroom. *BMC Cell Biol.* 7: 18.
5. Dietz, M.L., et al. 2006. Differential actin-dependent localization modulates the evolutionarily conserved activity of Shroom family proteins. *J. Biol. Chem.* 281: 20542-20554.
6. Lee, C., et al. 2007. Shroom family proteins regulate  $\gamma$ -tubulin distribution and microtubule architecture during epithelial cell shape change. *Development* 134: 1431-1441.
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## CHROMOSOMAL LOCATION

Genetic locus: SHROOM1 (human) mapping to 5q31.1; Shroom1 (mouse) mapping to 11 B1.3.

## SOURCE

SHROOM1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SHROOM1 of human origin.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165486 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SHROOM1 (N-16) is recommended for detection of SHROOM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with SHROOM4.

SHROOM1 (N-16) is also recommended for detection of SHROOM1 in additional species, including canine and porcine.

Suitable for use as control antibody for SHROOM1 siRNA (h): sc-91959, SHROOM1 siRNA (m): sc-153455, SHROOM1 shRNA Plasmid (h): sc-91959-SH, SHROOM1 shRNA Plasmid (m): sc-153455-SH, SHROOM1 shRNA (h) Lentiviral Particles: sc-91959-V and SHROOM1 shRNA (m) Lentiviral Particles: sc-153455-V.

Molecular Weight of SHROOM1: 91 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## RESEARCH USE

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