**BACKGROUND**

The gene shrm encodes a PDZ domain protein which regulates aspects of cytoarchitecture required for proper neurulation. PDZ domains mediate protein-protein interactions which facilitate membrane protein localization and signaling complex assembly. Mutation of the mouse Shrm causes neural tube defects (NTDs) attributed to failure of the neural tube to close during development. Targeted mutation studies have identified a number of factors which regulate neural tube morphogenesis. Shrm is strongly expressed in neural epithelium at the time of cranial tube closure. Shrm is a cytoskeletal protein with a size of ~205 kDa which localizes to adherens junctions and directly binds F-Actin. The Shrm protein can exist in a short and long form, ShrmS and ShrmL respectively.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: SHROOM3 (human) mapping to 4q21.1; Shrm (mouse) mapping to 5 E3.

**SOURCE**

Shrm (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Shrm of mouse 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-10309 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**STORAGE**

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

**APPLICATIONS**

Shrm (T-17) is recommended for detection of Shrm long and short forms 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Shrm siRNA (h): sc-42248, Shrm siRNA (m): sc-42249, Shrm shRNA Plasmid (h): sc-42248-SH, Shrm shRNA Plasmid (m): sc-42249-SH, Shrm shRNA (h) Lentiviral Particles: sc-42248-V and Shrm shRNA (m) Lentiviral Particles: sc-42249-V.

Molecular Weight of Shrm: 205 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: 1:200-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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™ Mounting Medium: sc-24941.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.