SANTA CRUZ BIOTECHNOLOGY, INC.

Sec15A (F-15): sc-34366



BACKGROUND

Exocytosis, crucial in membrane trafficking, mediates hormone and neurotransmitter secretion out of the cell as well as the incorporation of membrane proteins and lipids to the plasma membrane. It is crucial for cell-cell communication, cell growth and cell polarity. The exocyst complex is a multi-protein complex that consists of Sec3, Sec5, Sec6, Sec8, Sec10, Sec15, Exo70 and Exo84 and is essential for targeting exocytic vesicles to specific docking sites on the plasma membrane. The exocyst complex inhibits tubulin polymerization in vitro, which implicates the exocyst in modulating microtubule dynamics underlying exocytosis. Sec15A (also designated Sec15L or Sec15p) and Sec15B (also designated Sec15L2) both belong to the Sec15 family of proteins. Sec15 can co-localize with Rab11 (a recycling endosome marker) and exhibits a GTP-dependent interaction with the Rab11 GTPase.

REFERENCES

- 1. Wang, S., Liu, Y., Adamson, C.L., Valdez, G., Guo, W. and Hsu, S.C. 2004. The mammalian exocyst, a complex required for exocytosis, inhibits tubulin polymerization. J. Biol. Chem. 279: 35958-35966.
- 2. Zhang, X.M., Ellis, S., Sriratana, A., Mitchell, C.A. and Rowe, T. 2004. Sec15 is an effector for the Rab11 GTPase in mammalian cells. J. Biol. Chem. 279: 43027-43034.
- 3. Hsu, S.C., TerBush, D., Abraham, M. and Guo, W. 2004. The exocyst complex in polarized exocytosis. Int. Rev. Cytol. 233: 243-265.
- 4. SWISS-PROT/TrEMBL (Q8TAG9). World Wide Web URL: http://www. expasy.ch/sprot/sprot-top.html
- 5. World Wide Web URL: http://harvester.embl.de/harvester/Q9Y2/ Q9Y2D4.htm

CHROMOSOMAL LOCATION

Genetic locus: EXOC6 (human) mapping to 10q23.33; Exoc6 (mouse) mapping to 19 C2.

SOURCE

Sec15A (F-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sec15A of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34366 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.

PROTOCOLS

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

APPLICATIONS

Sec15A (F-15) is recommended for detection of Sec15A 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), 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).

Sec15A (F-15) is also recommended for detection of Sec15A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sec15A siRNA (h): sc-45347, Sec15A siRNA (m): sc-45348, Sec15A shRNA Plasmid (h): sc-45347-SH, Sec15A shRNA Plasmid (m): sc-45348-SH, Sec15A shRNA (h) Lentiviral Particles: sc-45347-V and Sec15A shRNA (m) Lentiviral Particles: sc-45348-V.

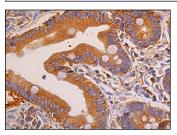
Molecular Weight (predicted) of Sec15A: 94 kDa.

Molecular Weight (observed) of Sec15A: 101 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™ 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) 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. 3) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Sec15A (F-15): sc-34366. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of alandular cells

RESEARCH USE

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