SANTA CRUZ BIOTECHNOLOGY, INC.

Sec15A (P-14): sc-34367

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 Rab 11 (a recycling endosome marker) and exhibits a GTP-dependent interaction with the Rab 11 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/Q8TA/Q8TAG9.htm

CHROMOSOMAL LOCATION

Genetic locus: EXOC6 (human) mapping to 10q23.33, EXOC6B (human) mapping to 2p13.2; Exoc6 (mouse) mapping to 19 C2, Exoc6b (mouse) mapping to 6 D1.

SOURCE

Sec15A (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sec15A 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-34367 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.

RESEARCH USE

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

APPLICATIONS

Sec15A (P-14) is recommended for detection of Sec15A and, to a lesser extent, Sec15B 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).

Sec15A (P-14) is also recommended for detection of Sec15A and, to a lesser extent, Sec15B in additional species, including equine, canine, bovine and avian.

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.

PROTOCOLS

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