SANTA CRUZ BIOTECHNOLOGY, INC.

Sec8 (LB-2): sc-100734

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Exocytosis is crucial in membrane trafficking and it 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,* suggesting that the exocyst complex is important for modulating the microtubule dynamics that underlie exocytosis. Sec8, also known as EXOC4 (exocyst complex component 4), REC8 or SEC8L1, is one of eight protein subunits composing the mammalian exocyst complex. Human Sec8 maps to chromosome 7q33.

REFERENCES

1. Potenza, M., et al. 1992. Sec6 encodes an 85 kDa soluble protein required for exocytosis in yeast. Yeast 8: 549-558.
2. TerBush, D.R., et al. 1995. Sec6, Sec8 and Sec15 are components of a multisubunit complex which localizes to small bud tips in *Saccharomyces cerevisiae*. J. Cell Biol. 130: 299-312.
3. Ting, A.E., et al. 1995. rSec6 and rSec8, mammalian homologs of yeast proteins essential for secretion. Proc. Natl. Acad. Sci. USA 92: 9613-9617.
4. Friedrich, G.A., et al. 1997. The secretory protein Sec8 is required for paraxial mesoderm formation in the mouse. Dev. Biol. 192: 364-374.
5. Grindstaff, K.K., et al. 1998. Sec6/8 complex is recruited to cell-cell contacts and specifies transport vesicle delivery to the basal-lateral membrane in epithelial cells. Cell 93: 731-740.
6. Hsu, S.C., et al. 1999. Targeting vesicles to specific sites on the plasma membrane: the role of the Sec6/8 complex. Trends Cell Biol. 9: 150-153.
7. Matern, H.T., et al. 2001. The Sec6/8 complex in mammalian cells: characterization of mammalian Sec3, subunit interactions, and expression of subunits in polarized cells. Proc. Natl. Acad. Sci. USA 98: 9648-9653.
8. Brymora, A., et al. 2001. The brain exocyst complex interacts with Ral A in a GTP-dependent manner: identification of a novel mammalian Sec3 gene and a second Sec15 gene. J. Biol. Chem. 276: 29792-29797.

CHROMOSOMAL LOCATION

Genetic locus: EXOC4 (human) mapping to 7q33; Exoc4 (mouse) mapping to 6 A3.3.

SOURCE

Sec8 (LB-2) is a mouse monoclonal antibody raised against recombinant Sec8 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.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Sec8 (LB-2) is recommended for detection of Sec8 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Sec8 siRNA (h): sc-60085, Sec8 siRNA (m): sc-60086, Sec8 shRNA Plasmid (h): sc-60085-SH, Sec8 shRNA Plasmid (m): sc-60086-SH, Sec8 shRNA (h) Lentiviral Particles: sc-60085-V and Sec8 shRNA (m) Lentiviral Particles: sc-60086-V.

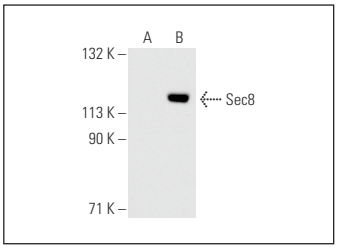
Molecular Weight of Sec8: 110 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Sec8 (h): 293T Lysate: sc-117287 or Sec8 (m): 293T Lysate: sc-123430.

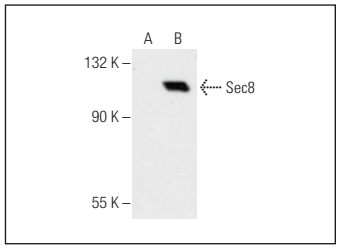
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Sec8 (LB-2): sc-100734. Western blot analysis of Sec8 expression in non-transfected: sc-117752 (**A**) and mouse Sec8 transfected: sc-123430 (**B**) 293T whole cell lysates.



Sec8 (LB-2): sc-100734. Western blot analysis of Sec8 expression in non-transfected: sc-117752 (**A**) and human Sec8 transfected: sc-117287 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Oksdath, M., et al. 2017. The motor KIF5C links the requirements of stable microtubules and IGF-1 receptor membrane insertion for neuronal polarization. Mol. Neurobiol. 54: 6085-6096.

RESEARCH USE

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