

Sec8 (B-11): sc-514215

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.

CHROMOSOMAL LOCATION

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

SOURCE

Sec8 (B-11) is a mouse monoclonal antibody raised against amino acids 675-974 mapping at the C-terminus of Sec8 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Sec8 (B-11) is available conjugated to agarose (sc-514215 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514215 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514215 PE), fluorescein (sc-514215 FITC), Alexa Fluor® 488 (sc-514215 AF488), Alexa Fluor® 546 (sc-514215 AF546), Alexa Fluor® 594 (sc-514215 AF594) or Alexa Fluor® 647 (sc-514215 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514215 AF680) or Alexa Fluor® 790 (sc-514215 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

Sec8 (B-11) is recommended for detection of Sec8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

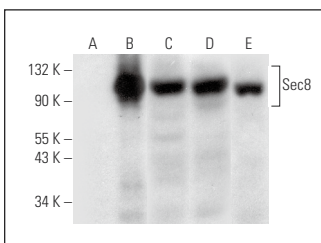
Molecular Weight of Sec8: 110 kDa.

Positive Controls: Sec8 (h): 293T Lysate: sc-117287, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

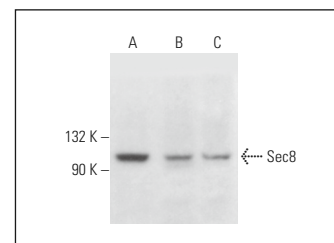
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Sec8 (B-11): sc-514215. Western blot analysis of Sec8 expression in non-transfected 293T: sc-117752 (A), human Sec8 transfected 293T: sc-117287 (B), HeLa (C) and Jurkat (D) whole cell lysates and HeLa nuclear extract (E).



Sec8 (B-11): sc-514215. Western blot analysis of Sec8 expression in A549 (A), SP2/0 (B) and KNRK (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kuramoto, K., et al. 2021. The autophagy protein Becn1 improves Insulin sensitivity by promoting adiponectin secretion via exocyst binding. *Cell Rep.* 35: 109184.

RESEARCH USE

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