

## Exo70 (K-13): sc-167767

### 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. Exo70, also known as EXOC7 (exocyst complex component 7), EXOC1 or 2-5-3p, is a 735 amino acid peripheral membrane protein that is a component of the exocyst complex. Localized to the cytoplasm and the cell membrane, Exo70 plays an essential role in the docking of exocystic vesicles to target sites on the plasma membrane and, specifically, may be involved in Insulin-induced protein docking within the cell. Four isoforms of Exo70 are expressed due to alternative splicing events.

### REFERENCES

1. Kee, Y., et al. 1997. Subunit structure of the mammalian exocyst complex. *Proc. Natl. Acad. Sci. USA* 94: 14438-14443.
2. Kikuno, R., et al. 1999. Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 6: 197-205.
3. 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.
4. Moskalenko, S., et al. 2003. Ral GTPases regulate exocyst assembly through dual subunit interactions. *J. Biol. Chem.* 278: 51743-51748.
5. Sans, N., et al. 2003. NMDA receptor trafficking through an interaction between PDZ proteins and the exocyst complex. *Nat. Cell Biol.* 5: 520-530.
6. Inoue, M., et al. 2003. The exocyst complex is required for targeting of Glut4 to the plasma membrane by Insulin. *Nature* 422: 629-633.

### CHROMOSOMAL LOCATION

Genetic locus: EXOC7 (human) mapping to 17q25.1; Exoc7 (mouse) mapping to 11 E2.

### SOURCE

Exo70 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Exo70 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-167767 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

Exo70 (K-13) is recommended for detection of Exo70 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); non cross-reactive with Exo1.

Suitable for use as control antibody for Exo70 siRNA (h): sc-94143, Exo70 siRNA (m): sc-144969, Exo70 shRNA Plasmid (h): sc-94143-SH, Exo70 shRNA Plasmid (m): sc-144969-SH, Exo70 shRNA (h) Lentiviral Particles: sc-94143-V and Exo70 shRNA (m) Lentiviral Particles: sc-144969-V.

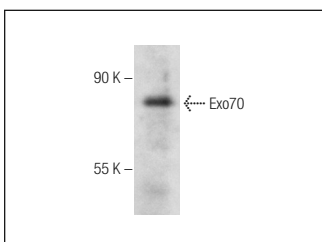
Molecular Weight of Exo70: 70 kDa.

Positive Controls: rat brain extract: sc-2392 or HeLa whole cell lysate: sc-2200.

### 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.

### DATA



Exo70 (K-13): sc-167767. Western blot analysis of Exo70 expression in rat brain tissue extract.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Exo70 (D-6): sc-365825** or **Exo70 (H-9): sc-514257**, our highly recommended monoclonal alternatives to Exo70 (K-13).