# Exo70 (m): 293T Lysate: sc-125314

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## 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.

7. Wang, S., et al. 2004. The mammalian exocyst, a complex required for exocytosis, inhibits tubulin polymerization. J. Biol. Chem. 279: 35958-35966.

8. Xu, K.F., et al. 2005. Interaction of BIG2, a brefeldin A-inhibited guanine nucleotide-exchange protein, with exocyst protein Exo70. Proc. Natl. Acad. Sci. USA 102: 2784-2789.

9. Zuo, X., et al. 2006. Exo70 interacts with the Arp2/3 complex and regulates cell migration. Nat. Cell Biol. 8: 1383-1388.

## CHROMOSOMAL LOCATION

Genetic locus: Exoc7 (mouse) mapping to 11 E2.

## PRODUCT

Exo70 (m): 293T Lysate represents a lysate of mouse Exo70 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

Exo70 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Exo70 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Exo70 (H-9): sc-514257 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Exo70 expression in Exo70 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## 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.

## DATA
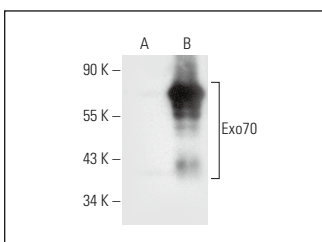


Exo70 (H-9): sc-514257. Western blot analysis of Exo70 expression in non-transfected: sc-117752 (**A**) and mouse Exo70 transfected: sc-125314 (**B**) 293T whole cell lysates.
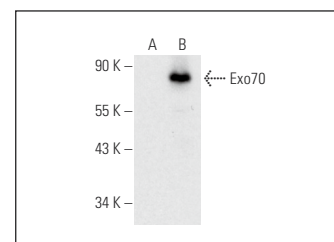
Exo70 (D-6): sc-365825. Western blot analysis of Exo70 expression in non-transfected: sc-117752 (**A**) and mouse Exo70 transfected: sc-125314 (**B**) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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