

Alix (m): 293T Lysate: sc-118357

BACKGROUND

ALG-2-interacting protein (Alix), also designated programmed cell death 6-interacting protein (PDCD6-interacting protein), is a cytoplasmic protein. Alix interacts with apoptosis-associated proteins (ALG-2 and PDCD6) and with the endocytosis-regulator CIN85. Additionally, Alix interacts with the endosomal sorting complexes required for transport (ESCRT) proteins (tsg 101 and CHMP4) and can associate with HIV-1. The endophilins (SH3P4, SH3P8 and SH3P13), enzymes that change curvature of the membrane that are required for early and late steps of coated vesicle formation, also bind to Alix. Alix is involved in the concentration and sorting of cargo proteins of the multivesicular body for incorporation into vesicles.

REFERENCES

- Segura-Morales, C., Pescia, C., Chatellard-Causse, C., Sadoul, R., Bertrand, E. and Basyuk, E. 2005. Tsg 101 and Alix interact with murine leukemia virus Gag and cooperate with NEDD4 ubiquitin ligases during budding. *J. Biol. Chem.* 280: 27004-27012.
- Chen, C., Vincent, O., Jin, J., Weisz, O.A. and Montelaro, R.C. 2005. Functions of early (AP-2) and late (AIP1/Alix) endocytic proteins in equine infectious anemia virus budding. *J. Biol. Chem.* 280: 40474-40480.
- Sakaguchi, T., Kato, A., Sugahara, F., Shimazu, Y., Inoue, M., Kiyotani, K., Nagai, Y. and Yoshida, T. 2005. AIP1/Alix is a binding partner of Sendai virus C protein and facilitates virus budding. *J. Virol.* 79: 8933-8941.
- Le Blanc, I., Luyet, P.P., Pons, V., Ferguson, C., Emans, N., Petiot, A., Mayran, N., Demareux, N., Fauré, J., Sadoul, R., Parton, R.G. and Gruenberg, J. 2005. Endosome-to-cytosol transport of viral nucleocapsids. *Nat. Cell Biol.* 7: 653-664.
- Kim, J., Sitaraman, S., Hierro, A., Beach, B.M., Odorizzi, G. and Hurley, J.H. 2005. Structural basis for endosomal targeting by the Bro1 domain. *Dev. Cell* 8: 937-947.
- Cabezas, A., Bache, K.G., Brech, A. and Stenmark, H. 2005. Alix regulates cortical Actin and the spatial distribution of endosomes. *J. Cell Sci.* 118: 2625-2635.
- Katoh, K., Suzuki, H., Terasawa, Y., Mizuno, T., Yasuda, J., Shibata, H. and Maki, M. 2005. The penta-EF-hand protein ALG-2 interacts directly with the ESCRT-I component tsg 101, and Ca²⁺-dependently co-localizes to aberrant endosomes with dominant-negative AAA ATPase SKD1/Vps4B. *Biochem. J.* 391: 677-685.
- Ichioka, F., Horii, M., Katoh, K., Terasawa, Y., Shibata, H. and Maki, M. 2005. Identification of Rab GTPase-activating protein-like protein (RabGAPLP) as a novel Alix/AIP1-interacting protein. *Biosci. Biotechnol. Biochem.* 69: 861-865.

CHROMOSOMAL LOCATION

Genetic locus: Pcd6ip (mouse) mapping to 9 F3.

PRODUCT

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

APPLICATIONS

Alix (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Alix 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.

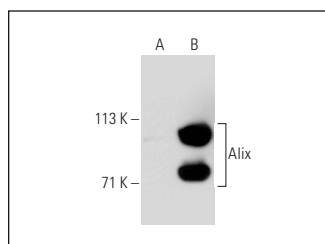
Alix (1A12): sc-53540 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Alix expression in Alix transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

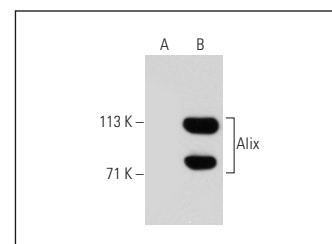
To ensure optimal results, the following support reagents are recommended:

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



Alix (1A12): sc-53540. Western blot analysis of Alix expression in non-transfected: sc-117752 (A) and mouse Alix transfected: sc-118357 (B) 293T whole cell lysates.



Alix (3A9): sc-53538. Western blot analysis of Alix expression in non-transfected: sc-117752 (A) and mouse Alix transfected: sc-118357 (B) 293T whole cell lysates.

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.

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.