

# Alix (h): 293 Lysate: sc-113330

## BACKGROUND

ALG-2-interacting protein (Alix), also designated programmed cell death 6-interacting protein (PDCD6-interacting protein) and HP95, is a cytoplasmic protein that interacts with apoptosis-associated proteins (ALG-2 and Pcd6) 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 membrane curvature 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.
- 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  $Ca^{2+}$ -dependently co-localizes to aberrant endosomes with dominant-negative AAA ATPase SKD1/VPS4B. *Biochem. J.* 391: 677-685.
- 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.
- Ichioka, F., Horii, M., Katoh, K., Terasawa, Y., Shibata, H. and Maki, M. 2005. Identification of Rab GTPase-activating protein-like protein (Rab GAPLP) as a novel Alix/AIP1-interacting protein. *Biosci. Biotechnol. Biochem.* 69: 861-865.

## 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.

## PROTOCOLS

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

## CHROMOSOMAL LOCATION

Genetic locus: PDCD6IP (human) mapping to 3p22.3.

## PRODUCT

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

## APPLICATIONS

Alix (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Alix antibodies. Recommended use: 10-20 µl per lane.

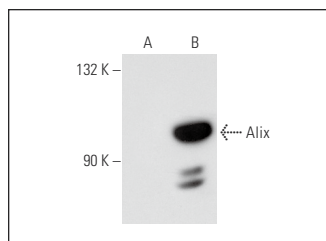
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

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

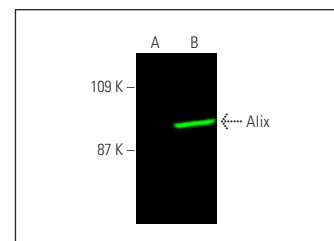
## RECOMMENDED SUPPORT REAGENTS

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-110760 (A) and human Alix transfected: sc-113330 (B) 293 whole cell lysates.



Alix (1A12): sc-53540. Near-infrared western blot analysis of Alix expression in non-transfected: sc-110760 (A) and human Alix transfected: sc-113330 (B) 293 whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

## RESEARCH USE

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