SANTA CRUZ BIOTECHNOLOGY, INC.

Alix (Q-19): sc-49268

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 PDCD6) and with the endocytosis-regulator CIN85. Additionally, Alix interacts with the endosomal sorting complexes required for transport (ESCRT) proteins (Tsg101 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 incorpoation into vesicles.

CHROMOSOMAL LOCATION

Genetic locus: PDCD6IP (human) mapping to 3p22.3; Pdcd6ip (mouse) mapping to 9 F3.

SOURCE

Alix (Q-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Alix 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-49268 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Alix (Q-19) is recommended for detection of Alix of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Alix (Q-19) is also recommended for detection of Alix in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Alix siRNA (h): sc-60149, Alix siRNA (m): sc-60150, Alix shRNA Plasmid (h): sc-60149-SH, Alix shRNA Plasmid (m): sc-60150-SH, Alix shRNA (h) Lentiviral Particles: sc-60149-V and Alix shRNA (m) Lentiviral Particles: sc-60150-V.

Molecular Weight of Alix: 95 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, U-937 nuclear extract: sc-2156 or Jurkat nuclear extract: sc-2132.

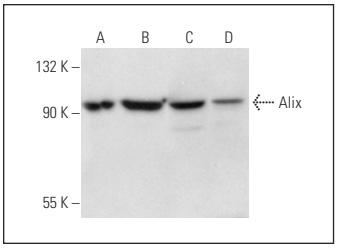
STORAGE

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

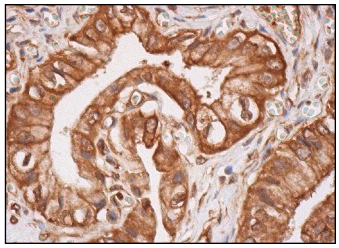
RESEARCH USE

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

DATA



Alix (Q-19): sc-49268. Western blot analysis of Alix expression in K-562 (**A**), U-937 (**B**), Jurkat (**C**) and THP-1 (**D**) nuclear extracts.



Alix (Q-19): sc-49268. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Kosaka, N., et al. 2010. Secretory mechanisms and intercellular transfer of microRNAs in living cells. J. Biol. Chem. 285: 17442-17452.
2. Guescini, M., et al. 2010. Astrocytes and glioblastoma cells release exosomes carrying mtDNA. J. Neural Transm. 117: 1-4.
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4. Guescini, M., et al. 2010. C2C12 myoblasts release micro-vesicles containing mtDNA and proteins involved in signal transduction. Exp. Cell Res. 316: 1977-1984.
5. Xin, H., et al. 2012. Exosome-mediated transfer of miR-133b from multipotent mesenchymal stromal cells to neural cells contributes to neurite outgrowth. Stem Cells 30: 1556-1564.
6. Lutz, D., et al. 2013. Generation and nuclear translocation of sumoylated transmembrane fragment of cell adhesion molecule L1. J. Biol. Chem. 287: 17161-17175.
7. Kosaka, N., et al. 2013. Neutral sphingomyelinase 2 (nSMase2)-dependent exosomal transfer of angiogenic microRNAs regulate cancer cell metastasis. J. Biol. Chem. 288: 10849-10859.
8. Boonyaratanakornkit, J., et al. 2013. Alix serves as an adaptor that allows human parainfluenza virus type 1 to interact with the host cell ESCRT system. PLoS ONE 8: e59462.
9. Forterre, A., et al. 2014. Proteomic analysis of C2C12 myoblast and myotube exosome-like vesicles: a new paradigm for myoblast-myotube cross talk? PLoS ONE 9: e84153.
10. Forterre, A., et al. 2014. Myotube-derived exosomal miRNAs downregulate Sirtuin1 in myoblasts during muscle cell differentiation. Cell Cycle 13: 78-89.
11. Guay, C., et al. 2015. Horizontal transfer of exosomal microRNAs transduce apoptotic signals between pancreatic β-cells. Cell Commun. Signal. 19: 17.