SANTA CRUZ BIOTECHNOLOGY, INC.

Alix (C-11): sc-271975

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 (C-11) is a mouse monoclonal antibody raised against amino acids 463-732 mapping near the C-terminus of Alix of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Alix (C-11) is available conjugated to agarose (sc-271975 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271975 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271975 PE), fluorescein (sc-271975 FITC), Alexa Fluor® 488 (sc-271975 AF488), Alexa Fluor® 546 (sc-271975 AF546), Alexa Fluor® 594 (sc-271975 AF594) or Alexa Fluor® 647 (sc-271975 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271975 AF680) or Alexa Fluor® 790 (sc-271975 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Alix (C-11) is recommended for detection of Alix of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or WEHI-231 whole cell lysate: sc-2213.

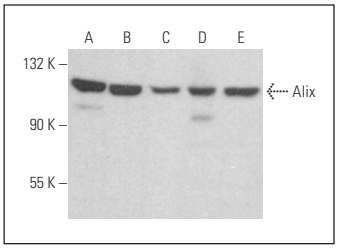
STORAGE

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

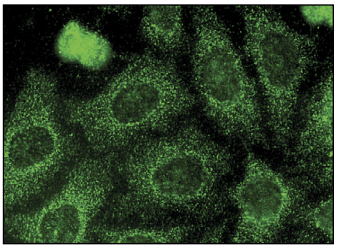
RESEARCH USE

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

DATA



Alix (C-11): sc-271975. Western blot analysis of Alix expression in Jurkat (**A**), K-562 (**B**), RAW 264.7 (**C**), Sol8 (**D**) and WEHI-231 (**E**) whole cell lysates.



Alix (C-11): sc-271975. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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2. Bailey, J.K., et al. 2015. WD repeat-containing protein 5 (WDR5) localizes to the midbody and regulates abscission. J. Biol. Chem. 290: 8987-9001.
3. Iavello, A., et al. 2016. Role of Alix in miRNA packaging during extracellular vesicle biogenesis. Int. J. Mol. Med. 37: 958-966.
4. Giacomini, E., et al. 2017. Secretome of *in vitro* cultured human embryos contains extracellular vesicles that are uptaken by the maternal side. Sci. Rep. 7: 5210.
5. Murdica, V., et al. 2019. Proteomic analysis reveals the negative modulator of sperm function glycodelin as over-represented in semen exosomes isolated from asthenozoospermic patients. Hum. Reprod. 34: 1416-1427.
6. Düchler, M., et al. 2019. Melanoma-derived extracellular vesicles bear the potential for the induction of antigen-specific tolerance. Cells 8: 665.
7. Wu, S.F., et al. 2020. Extracellular vesicles in diabetes mellitus induce alterations in endothelial cell morphology and migration. J. Transl. Med. 18: 230.
8. Carbotti, G., et al. 2020. Cytokine-induced guanylate binding protein 1 (GBP1) release from human ovarian cancer cells. Cancers 12: 488.
9. Gori, A., et al. 2020. Membrane-binding peptides for extracellular vesicles on-chip analysis. J. Extracell. Vesicles 9: 1751428.
10. Murdica, V., et al. 2020. *In vitro* cultured human endometrial cells release extracellular vesicles that can be uptaken by spermatozoa. Sci. Rep. 10: 8856.

PROTOCOLS

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