SANTA CRUZ BIOTECHNOLOGY, INC.

Alix (3A9): sc-53538

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 incorporation into vesicles.

CHROMOSOMAL LOCATION

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

SOURCE

Alix (3A9) is a mouse monoclonal antibody raised against full length Alix of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Alix (3A9) is available conjugated to agarose (sc-53538 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53538 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53538 PE), fluorescein (sc-53538 FITC), Alexa Fluor® 488 (sc-53538 AF488), Alexa Fluor® 546 (sc-53538 AF546), Alexa Fluor® 594 (sc-53538 AF594) or Alexa Fluor® 647 (sc-53538 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53538 AF680) or Alexa Fluor® 790 (sc-53538 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Alix (3A9) is recommended for detection of Alix of mouse, rat, human and *Xenopus laevis* 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).

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.

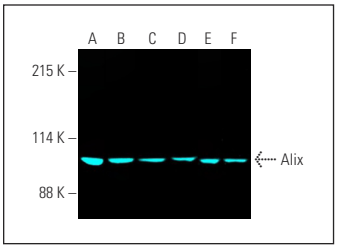
Molecular Weight of Alix: 95 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or HeLa nuclear extract: sc-2120.

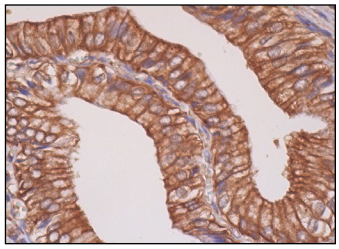
STORAGE

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

DATA



Alix (3A9) Alexa Fluor® 647: sc-53538 AF647. Direct fluorescent western blot analysis of Alix expression in K-562 (**A**), HeLa (**B**), Jurkat (**C**) and NIH/3T3 (**D**) whole cell lysates and K-562 (**E**) and HeLa (**F**) nuclear extracts. Blocked with UltraCruz® Blocking Reagent: sc-516214.



Alix (3A9): sc-53538. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Bongiovanni, A., et al. 2012. Alix protein is substrate of Ozz-E3 ligase and modulates actin remodeling in skeletal muscle. J. Biol. Chem. 287: 12159-12171.
2. Romancino, D.P., et al. 2013. Identification and characterization of PlAlix, the Alix homologue from the Mediterranean sea urchin *Paracentrotus lividus*. Dev. Growth Differ. 55: 237-46.
3. Riches, A., et al. 2014. Regulation of exosome release from mammary epithelial and breast cancer cells-a new regulatory pathway. Eur. J. Cancer 50: 1025-1034.
4. Riches, A., et al. 2015. Human urinary exosomes in bladder cancer patients: properties, concentrations and possible clinical application. Bladder 2: e19.
5. Kamranvar, S.A., et al. 2016. Integrin signaling via FAK-Src controls cytokinetic abscission by decelerating PLK1 degradation and subsequent recruitment of CEP55 at the midbody. Oncotarget 7: 30820-30830.
6. Nielsen, M.R., et al. 2017. Urine exosomes from healthy and hypertensive pregnancies display elevated level of α-subunit and cleaved α- and γ-subunits of the epithelial sodium channel-ENaC. Pflugers Arch. 469: 1107-1119.
7. Arakaki, A.K.S., et al. 2018. The α-arrestin ARRDC3 suppresses breast carcinoma invasion by regulating G protein-coupled receptor lysosomal sorting and signaling. J. Biol. Chem. 293: 3350-3362.
8. Rahman, M.M., et al. 2019. Acidification effects on isolation of extracellular vesicles from bovine milk. PLoS ONE 14: e0222613.
9. Akiyama, H., et al. 2020. Glucocerebrosidases catalyze a transgalactosylation reaction that yields a newly identified brain sterol metabolite, galactosylated cholesterol. J. Biol. Chem. 295: 5257-5277.

RESEARCH USE

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