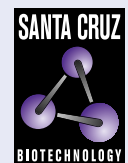


# CD9 (ALB 6): sc-59140



The Power to Question

## BACKGROUND

CD9 is a type IV transmembrane glycoprotein with four transmembrane domains. CD9 on pre-B cells may play a role in cell-cell adhesion. In addition, CD9 may play a role in signal transduction mediated by interaction with low molecular weight GTP binding proteins. CD9 is expressed on early B cells, eosinophils, basophils and activated T cells and is a major component of the platelet cell surface. It is also expressed on most non-T acute lymphoblastic leukemia cells and on some acute myeloid and chronic lymphoid leukemias.

## REFERENCES

1. Seehafer, J.G., et al. 1991. Evidence that the signal-initiating membrane protein CD9 is associated with small GTP-binding proteins. *Biochem. Biophys. Res. Commun.* 179: 401-406.
2. Lanza, F., et al. 1991. cDNA cloning and expression of platelet p24/CD9. Evidence for a new family of multiple membrane-spanning proteins. *J. Biol. Chem.* 266: 10638-10645.
3. Ferrero, D., et al. 1991. CD9 antigen on acute non-lymphoid leukemia cells: preferential expression by promyelocytic (M3) subtype. *Leuk. Res.* 15: 457-461.
4. Masellis-Smith, A., et al. 1994. CD9-regulated adhesion. Anti-CD9 monoclonal antibody induce pre-B cell adhesion to bone marrow fibroblasts through *de novo* recognition of Fibronectin. *J. Immunol.* 152: 2768-2777.

## CHROMOSOMAL LOCATION

Genetic locus: CD9 (human) mapping to 12p13.31.

## SOURCE

CD9 (ALB 6) is a mouse monoclonal antibody raised against bone marrow of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and 0.05% stabilizer protein.

## APPLICATIONS

CD9 (ALB 6) is recommended for detection of CD9 of 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) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for CD9 siRNA (h): sc-35032, CD9 shRNA Plasmid (h): sc-35032-SH and CD9 shRNA (h) Lentiviral Particles: sc-35032-V.

Molecular Weight of CD9: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, BT-20 cell lysate: sc-2223 or ZR-75-1 cell lysate: sc-2241.

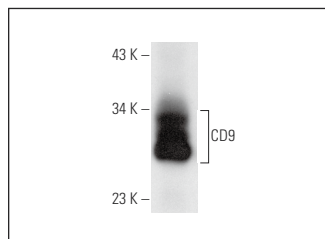
## RESEARCH USE

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

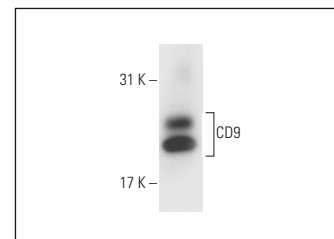
## STORAGE

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

## DATA



CD9 (ALB 6): sc-59140. Western blot analysis of CD9 expression in human PBL whole cell lysate.



CD9 (ALB 6): sc-59140. Western blot analysis of CD9 expression in HeLa whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Colin, S., et al. 2011. A truncated form of CD9-partner 1 (CD9P-1), GS-168AT2, potently inhibits *in vivo* tumour-induced angiogenesis and tumour growth. *Br. J. Cancer* 105: 1002-1011.
2. Yoshioka, Y., et al. 2013. Comparative marker analysis of extracellular vesicles in different human cancer types. *J. Extracell. Vesicles*. E-published.
3. Orchard-Webb, D.J., et al. 2014. CUB domain containing protein 1 (CDCP1) modulates adhesion and motility in colon cancer cells. *BMC Cancer* 14: 754.
4. Saari, H., et al. 2015. Microvesicle- and exosome-mediated drug delivery enhances the cytotoxicity of Paclitaxel in autologous prostate cancer cells. *J. Control. Release* 220: 727-737.
5. Yokoi, A., et al. 2017. Malignant extracellular vesicles carrying MMP1 mRNA facilitate peritoneal dissemination in ovarian cancer. *Nat. Commun.* 8: 14470.
6. Joy, A.P., et al. 2018. Proteome profiling of extracellular vesicles captured with the affinity peptide Vn96: comparison of Laemmli and TRIZOLy protein-extraction methods. *J. Extracell. Vesicles* 7: 1438727.
7. Hasegawa, T., et al. 2018. Characterization and evidence of the miR-888 cluster as a novel cancer network in prostate. *Mol. Cancer Res.* 16: 669-681.
8. Liu, Z., et al. 2018. Isolation and characterization of human urine extracellular vesicles. *Cell Stress Chaperones* 23: 943-953.
9. Santangelo, L., et al. 2018. Hepatitis C virus direct-acting antivirals therapy impacts on extracellular vesicles microRNAs content and on their immunomodulating properties. *Liver Int.* 38: 1741-1750.



See **CD9 (C-4): sc-13118** for CD9 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.