CD34 (h): 293T Lysate: sc-113830



The Power to Question

BACKGROUND

CD34 is a heavily glycosylated, transmembrane glycoprotein that is expressed on the surface of lymphohematopoietic stem and progenitor cells, small-vessel endothelial cells, embryonic fibroblasts and some cells in fetal and adult nervous tissue. CD34 antigen expression is highest in the most primitive stem cells and is gradually lost as lineage-committed progenitors differentiate. The CD34 antigen is also present on capillary endothelial cells and on bone marrow stromal cells. The CD34 cytoplasmic domain has an intracellular domain that contains consensus sites for activated protein kinase C (PKC) phosphorylation as well as serine, threonine and tyrosine phosphorylation consensus sites.

REFERENCES

- Buck, C.A., Baldwin, H.S., DeLisser, H., Mickanin, C., Shen, H.M., Kennedy, G., Chen, A., Edelman, J.M. and Albelda, S.M. 1994. Cell adhesion receptors and early mammalian heart development: an overview. C. R. Acad. Sci. III, Sci. Vie 316: 838-859.
- 2. DeLisser, H.M., Newman, P.J. and Albelda, S.M. 1994. Platelet endothelial cell adhesion molecule (CD31). Curr. Top. Microbiol. Immunol. 184: 37-45.
- Krause, D.S., Ito, T., Fackler, M.J., Smith, O.M., Collector, M.I., Sharkis, S.J. and May, W.S. 1994. Characterization of murine CD34, a marker for hematopoietic progenitor and stem cells. Blood 84: 691-701.
- 4. Holyoake, T.L. and Alcorn, M.J. 1994. CD34+ positive haemopoietic cells: biology and clinical applications. Blood Rev. 8: 113-124.
- 5. Lin, G., Finger, E. and Gutierrez-Ramos, J.C. 1995. Expression of CD34 in endothelial cells, hematopoietic progenitors and nervous cells in fetal and adult mouse tissues. Eur. J. Immunol. 25: 1508-1516.
- Lasky, L.A. 1995. Selectin-carbohydrate interactions and the initiation of the inflammatory response. Annu. Rev. Biochem. 64: 113-139.
- Drew, E., Merzaban, J.S., Seo, W., Ziltener, H.J. and McNagny, K.M. 2005. CD34 and CD43 inhibit mast cell adhesion and are required for optimal mast cell reconstitution. Immunity 22: 43-57.
- 8. Syme, R., Bajwa, R., Robertson, L., Stewart, D. and Glück, S. 2005. Comparison of CD34 and monocyte-derived dendritic cells from mobilized peripheral blood from cancer patients. Stem Cells 23: 74-81.
- Young, M.R. and Cigal, M. 2005. Tumor skewing of CD34+ cell differentiation from a dendritic cell pathway into endothelial cells. Cancer Immunol. Immunother. 55: 558-568.

CHROMOSOMAL LOCATION

Genetic locus: CD34 (human) mapping to 1q32.2.

PRODUCT

CD34 (h): 293T Lysate represents a lysate of human CD34 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

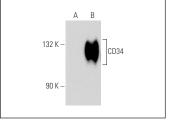
APPLICATIONS

CD34 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CD34 antibodies. Recommended use: 10-20 µl per lane.

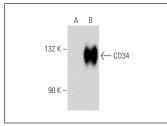
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

CD34 (QBEnd/10): sc-52312 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD34 expression in CD34 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA







CD34 (43A1): sc-65261. Western blot analysis of CD34 expression in non-transfected: sc-117752 (A) and human CD34 transfected: sc-113830 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com