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Rabbit Anti-CD34 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52283

Product Information

Application	WB, E
Primary Accession	Q64314
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40983
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CD34
Epitope Specificity	201-300/382
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein.
SIMILARITY	Belongs to the CD34 family.
Post-translational modifications	Highly glycosylated.Phosphorylated on serine residues by PKC.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The highly glycosylated 75-120 kD antigen CD34 is possibly an adhesion molecule with a putative role in early hematopoiesis by mediating the attachment of stem cells to the bone marrow extracellular matrix or directly to stromal cells. It could act as a scaffold for the attachment of lineage specific glycans, allowing stem cells to bind to lectins expressed by stromal cells or other marrow components. CD34 is thought to have a role in presenting carbohydrate ligands to selectins. The intracellular chain of the CD34 antigen is a site of phosphorylation by activated protein kinase C, suggesting a putative role in signal transduction. Two isoforms of CD34 have been reported to be generated by alternative splicing. CD34 is highly expressed on hematopoietic progenitors, as well as on endothelial cells, brain, and testis. Staining for CD34 has been used to measure angiogenesis, which reportedly predicts tumor recurrence.

Additional Information

Gene ID	12490
Other Names	AU496; Hematopoietic progenitor cell antigen CD34; CD34
Target/Specificity	Selectively expressed on hematopoietic progenitor cells and the small vessel endothelium of a variety of tissues.

Dilution	WB=1:500-2000,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Cd34
Function	Possible adhesion molecule with a role in early hematopoiesis by mediating the attachment of stem cells to the bone marrow extracellular matrix or directly to stromal cells. Could act as a scaffold for the attachment of lineage specific glycans, allowing stem cells to bind to lectins expressed by stromal cells or other marrow components. Presents carbohydrate ligands to selectins (By similarity).
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Expressed in the kidney where it is detected in the thin limb of Henle's loop (at protein level) (PubMed:31605441). Highly expressed in hematopoietic progenitor cell lines, brain and testis, and moderately in the thymus, spleen, and bone marrow, but not in adult liver (PubMed:1709048).

Background

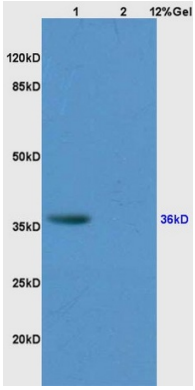
Possible adhesion molecule with a role in early hematopoiesis by mediating the attachment of stem cells to the bone marrow extracellular matrix or directly to stromal cells. Could act as a scaffold for the attachment of lineage specific glycans, allowing stem cells to bind to lectins expressed by stromal cells or other marrow components. Presents carbohydrate ligands to selectins (By similarity).

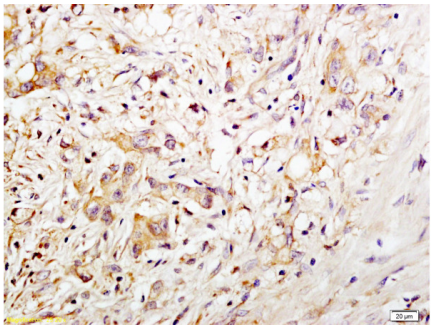
References

Brown J.,et al.Int. Immunol. 3:175-184(1991).
Suda J.,et al.Blood 79:2288-2295(1992).
Rush J.,et al.Nat. Biotechnol. 23:94-101(2005).
Cao L.,et al.J. Immunol. 179:5864-5876(2007).
Gundry R.L.,et al.Mol. Cell. Proteomics 8:2555-2569(2009).

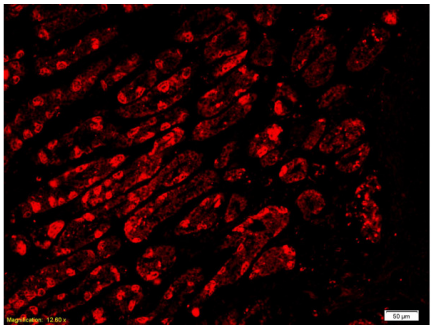
Images

Lane 1: human colon carcinoma Lane 2: rat kidney lysates probed with Anti CD34 Polyclonal Antibody, Unconjugated (AP52283) at 1:200 in 4˚C. Followed by conjugation to secondary antibody at 1:3000 90min in 37˚C. Predicted band 39kD. Observed band size: 39kD.





Formalin-fixed and paraffin embedded human gastric carcinoma tissue labeled with Anti-CD34 Polyclonal Antibody, Unconjugated(AP52283) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Formalin-fixed and paraffin embedded human gastric adenocarcinoma tissue labeled with Anti-CD34 Polyclonal Antibody, Unconjugated AP52283 at 1:200 followed by conjugation to the secondary antibody, Goat Anti-Rabbit IgG, Cy3 conjugated, and DAPI staining

Citations

- MicroRNA let-7c-5p promotes osteogenic differentiation of dental pulp stem cells by inhibiting lipopolysaccharide-induced inflammation via HMGA2/PI3K/Akt signal blockade.