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CD34 Antibody (Center)

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1825a

Product Information

Application	WB, IHC-P, IHC-P-Leica, E
Primary Accession	P28906
Other Accession	NP_001764
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1κ
Clone Names	132CT29.1.5
Calculated MW	40716
Antigen Region	185-214

Additional Information

Gene ID	947
Other Names	Hematopoietic progenitor cell antigen CD34, CD34, CD34
Target/Specificity	This CD34 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 185-214 amino acids from the Central region of human CD34.
Dilution	WB~~1:500~1000 IHC-P~~1:100~500 IHC-P-Leica~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD34 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Selectively expressed on hematopoietic progenitor cells and the small vessel endothelium of a variety of tissues

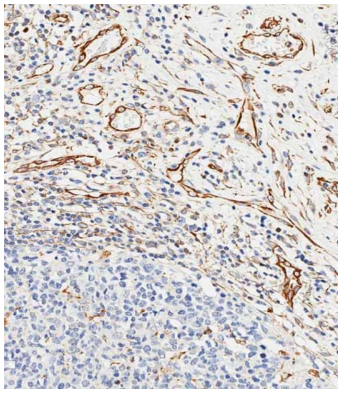
Background

CD34 is a monomeric cell surface antigen with a molecular mass of approximately 110 kD that is selectively expressed on human hematopoietic progenitor cells.

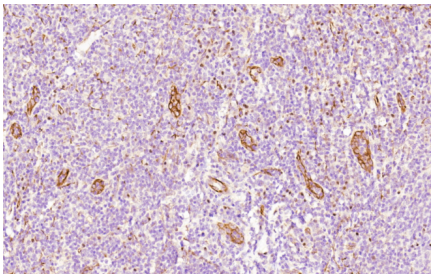
References

Genome-wide association analysis identifies multiple loci related to resting heart rate. Eijgelsheim M, et al. Hum Mol Genet, 2010 Oct 1. PMID 20639392. The effect of CXCL12 processing on CD34+ cell migration in myeloproliferative neoplasms. Cho SY, et al. Cancer Res, 2010 Apr 15. PMID 20388788. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. Junctional adhesion molecule A expressed on human CD34+ cells promotes adhesion on vascular wall and differentiation into endothelial progenitor cells. Stellos K, et al. Arterioscler Thromb Vasc Biol, 2010 Jun. PMID 20378847. Human gallbladder carcinoma: Role of neurotrophins, MIB-1, CD34 and CA15-3. Artico M, et al. Eur J Histochem, 2010 Mar 11. PMID 20353905.

Images

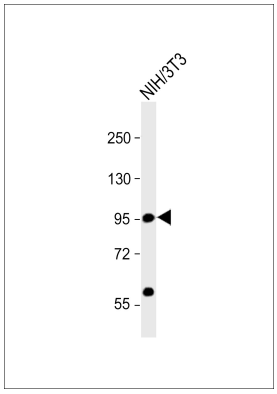


Immunohistochemical analysis of paraffin-embedded human appendix tissue using AM1825a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody (1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human tonsil section using Pink1(Cat#AM1825a). AM1825a was diluted at 1:1000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Anti-CD34 Antibody (Center) at 1:1000 dilution + NIH/3T3 whole cell lysate Secondary Goat Anti-mouse IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40716 Da Blocking/Dilution buffer: 5% NFDM/TBST.



Citations

- Butaselen prevents hepatocarcinogenesis and progression through inhibiting thioredoxin reductase activity.
- Concurrent chemoradiotherapy with low-dose docetaxel inhibits the growth of DU-145 prostate cancer xenografts.
- Inhibition of PDGF, TGF-□, and Abl signaling and reduction of liver fibrosis by the small molecule Bcr-Abl tyrosine kinase antagonist Nilotinib.

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