

CD34 Antibody (Center)

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM1825a

Specification

CD34 Antibody (Center) - Product Information

Application IHC, WB, IHC-P-Leica, E **Primary Accession** P28906 Other Accession NP 001764 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype IgG1_k Antigen Region 185-214

CD34 Antibody (Center) - 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 IHC~~1:1000 WB~~1:1000 IHC-P-Leica~~1:1000

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.

CD34 Antibody (Center) - 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

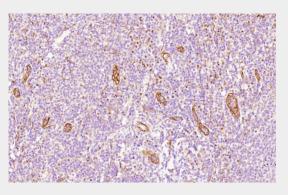
Selectively expressed on hematopoietic progenitor cells and the small vessel endothelium of a variety of tissues

CD34 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

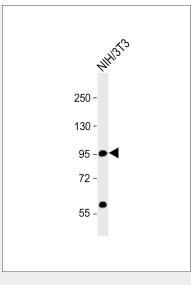
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD34 Antibody (Center) - Images

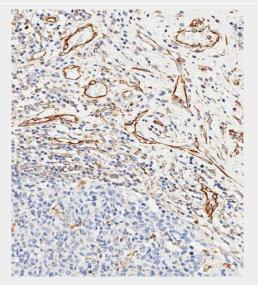


Immunohistochemical analysis of paraffin-embedded Human tonsil section using Pink1(Cat#AM1825a). AM1825a was diluted at 1:1000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.





"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."



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.

CD34 Antibody (Center) - 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.

CD34 Antibody (Center) - 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.

CD34 Antibody (Center) - Citations

- Butaselen prevents hepatocarcinogenesis and progression through inhibiting thioredoxin reductase activity.
- Overexpression of FZD1 and CAIX are Associated with Invasion, Metastasis, and Poor-Prognosis of the Pancreatic Ductal Adenocarcinoma.
- <u>Concurrent chemoradiotherapy with low-dose docetaxel inhibits the growth of DU-145</u> prostate cancer xenografts.
- Inhibition of PDGF, TGF-Î², and Abl signaling and reduction of liver fibrosis by the small molecule Bcr-Abl tyrosine kinase antagonist Nilotinib.