

Rabbit anti-Mouse, Rat CD34 Polyclonal Antibody | anti-Cd34 antibody

Anti-CD34 Antibody

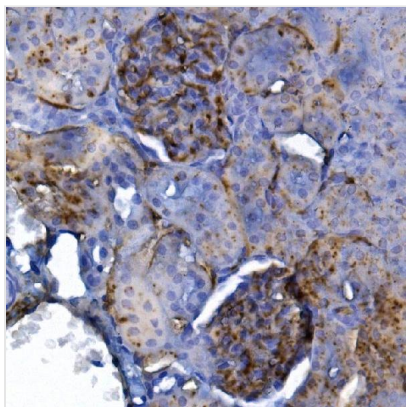
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125577	Rabbit	Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CD34; Polyclonal Antibody; Anti-CD34 Antibody; Hematopoietic progenitor cell antigen CD34; CD antigen CD34; CD34 molecule; anti-Cd34 antibody

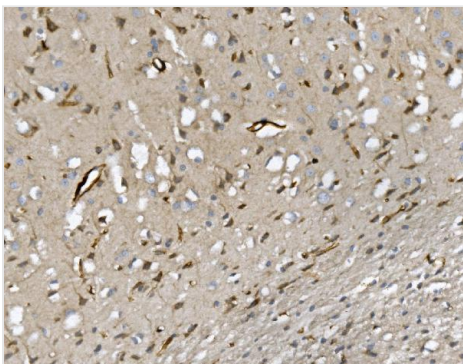
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for CD3 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-Cd34 antibody	ELISA (Direct ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived rat CD34 recombinant protein (Position: S170-L386).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



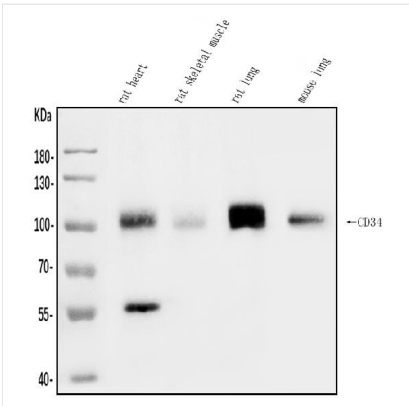
IHC (Immunohistochemistry)

Figure 3. IHC analysis of CD34 using anti-CD34 antibody (AAA125577).CD34 was detected in paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-CD34 Antibody (AAA125577) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of CD34 using anti-CD34 antibody (AAA125577).CD34 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-CD34 Antibody (AAA125577) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of CD34 using anti-CD34 antibody (AAA125577).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: rat heart tissue lysatesLane 2: rat skeletal muscle tissue lysatesLane 3: rat lung tissue lysatesLane 4: mouse lung tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-CD34 antigen affinity purified polyclonal antibody (Catalog # AAA125577) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD34 at approximately 105KD. The expected band size for CD34 is at 105KD.

ADDITIONAL INFORMATION

Related Product Information for anti-
Cd34 antibody

CD34 is a monomeric cell surface antigen with a molecular mass of approximately 110 KD. CD34 is expressed in humans in hematopoietic stem cells, vascular endothelium, and blasts from 30% of patients with acute myeloid and lymphocytic leukemia. The human CD34 gene spans 26 kb and has 8 exons, a structure quite similar to that of the murine gene. By Southern blot analysis of DNA from a panel of human x mouse somatic cell hybrids using a CD34 cDNA probe demonstrate that the gene for CD34 is located on human chromosome 1 in the 1q12----qter region. CD34 plays an important role in the formation of progenitor cells during both embryonic and adult hematopoiesis.

References	1. Satterthwaite, A. B., Burn, T. C., Le Beau, M. M., Tenen, D. G. Structure of the gene encoding CD34, a human hematopoietic stem cell antigen. Genomics 12: 788-794, 1992. 2. Tenen, D. G., Satterthwaite, A. B., Borson, R., Simmons, D., Eddy, R. L., Shows, T. B. Chromosome 1 localization of the gene for CD34, a surface antigen of human stem cells. Cytogenet. Cell Genet. 53: 55-57, 1990. 3. Cheng, J., Baumhueter, S., Cacalano, G., Carver-Moore, K., Thibodeaux, H., Thomas, R., Broxmeyer, H. E., Cooper, S., Hague, N., Moore, M., Lasky, L. A. Hematopoietic defects in mice lacking the sialomucin CD34. Blood 87: 479-490, 1996.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	157821377
NCBI GeneID	305081
NCBI Accession #	NP_001100672.1
NCBI GenBank Nucleotide #	NM_001107202.2
UniProt Accession #	B1PLB1
Molecular Weight	41,239 Da
NCBI Official Full Name	hematopoietic progenitor cell antigen CD34
NCBI Official Synonym Full Names	CD34 molecule
NCBI Official Symbol	Cd34
NCBI Protein Information	hematopoietic progenitor cell antigen CD34
UniProt Protein Name	CD34 antigen (Predicted)
UniProt Gene Name	Cd34

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.