

KNT-01-001x 100 µg
Lot Nor: See product label

Monoclonal mouse anti-human CD34 antibody

Background:

CD34 is a transmembrane glycoprotein with the size of 150kDa, present on different types of stem cells and progenitor cells. It is also expressed in vascular endothelial cells and embryonic fibroblasts. It is a well-known marker of hematopoietic stem cells. Its possible function is involving the regulation of cell adhesion, proliferation, and differentiation. It is usually used as a marker of multipotent hematopoietic cells, as differentiated hematopoietic cells do not express CD34. It can also be used in identifying different classes of stem cells, as well as in studies examining the phenotypes present in hematologic malignancies or differentiation difficulties. Endothelial progenitor cells (EPCs) can be selected too via CD34 labeling.

Chromosomal location:

1q32.2

Immunogene:

Monoclonal antibody is produced by immunizing BALB/c mice with purified recombinant extracellular domain of human CD34 protein.

Recombinant protein sequence: MSLDNNGTAT PELPTQGTFS NVSTNVSYQE TTPSTLGST
SLHPVSQHGN EATTNITETT VKFTSTSVIT SVYGNTNSSV QSQTSVISTV FTTPANVSTP
ETTLKPSLSP GNVS DLSTTS TSLATSPTKP YTSSSPILSD IKAIEKCSGI REVKLTQGIC
LEQNKTSSCA EFKKDRGEG L ARVLCGEEQA DADAGAQVCS LLLAQSEVRP QCLLVLANR
TEISSKLQLM KKHQSDLKKL GILDFTEQDV ASHQSYSQKT

Clone number: E2E6-1 **Isotype:** IgG1

Product:

Each vial contains 100 µg of antibody in 100 µl of PBS with 0,1% sodium azide

Applications:

Recommended for Western Blotting (starting dilution: 1:500), flow cytometry (starting dilution: 1:50), immunohistochemistry on either frozen (starting dilution: 1:100) or paraffin-embedded tissue samples (starting dilution: 1:50).

Species reactivity: React with: Human

Tested applications: suitable for: WB, Flow cytometry, IHC-P

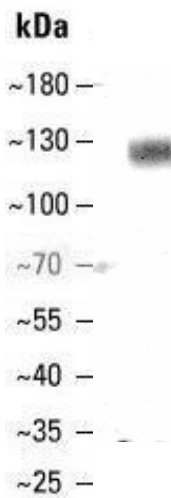
Protocols:

For western blot usage, dilute the antibody in the solution of 5% w/v nonfat dry milk in 1xTBS supplemented with 0,1% Tween®20 and 0,002M sodium-azide. Incubate the membranes at 4°C overnight, with gentle shaking. Keep the diluted antibody in 4°C for up to one month for reuse.

For immunohistochemistry and flow cytometry use, dilute the antibody in PBS. Live cells are recommended to be labeled at 37°C for 30 minutes. Tissue sections are recommended to be stained at 4°C overnight.

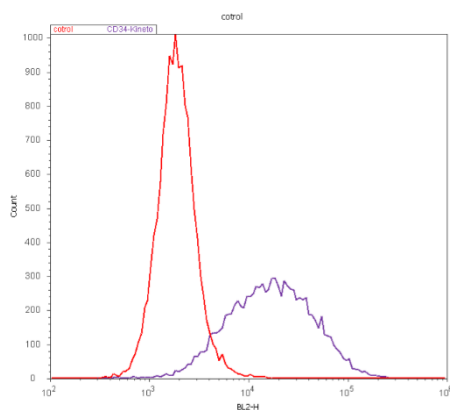
Storage:

Store the antibody stock at -20°C.



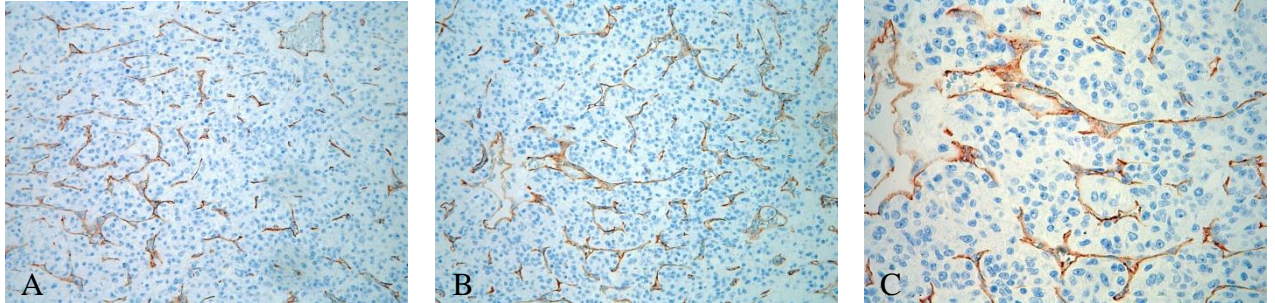
Western Blot analysis of HUVEC cell culture whole cell lysate using CD34 Mouse MAb.

The primary antibody blot was labeled with anti-mouse IgG-HRP conjugate secondary antibody, and the protein band was detected with enhanced chemiluminescence.



Flow cytometry measurement on HUVEC cells.

10000 live cells were evaluated in each group. Control cells were only labeled with Alexa Fluor 488 Goat Anti-mouse IgG2a secondary antibody for background measurement.



Immunohistochemistry performed on paraffin-embedded human clear cell renal cell carcinoma samples.

Magnification: 200x(A-B), 400x (C)

Vascular endothelial cells are stained red/brown. Cell nuclei are stained blue.

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