

Mouse anti-Human CD34 Antibody | anti-CD34 antibody

Anti-Hu CD34 PE-Cy5

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA129360	Mouse	Human	Flow Cytometry, Functional Assay

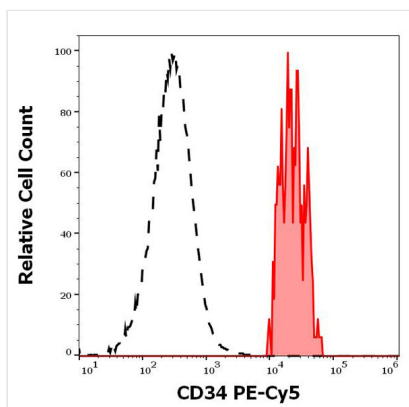
PRODUCT SYNONYMS

CD34; Anti-Hu CD34 PE-Cy5; CD34 molecule; anti-CD34 antibody

PRODUCT SPECIFICATIONS

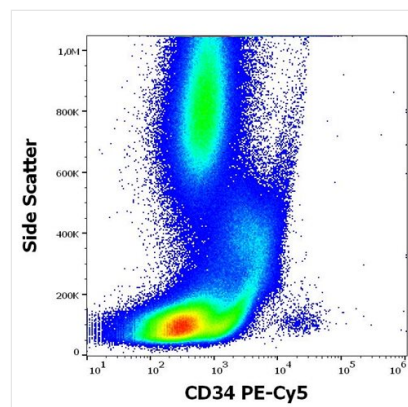
Host	Mouse
Reactivity	Human
Isotype	Mouse IgG1
Clone Number	4H11[APG]
Specificity	The mouse monoclonal antibody 4H11[APG] reacts with extracellular class III epitope on CD34, a 110-115 kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and on the most pluripotent stem cells; it is gradually lost on progenitor cells. The antibody 4H11[APG] completely blocks binding of class III antibodies BIRMA K3 and 8G12 on KG1a cell line.
Purity/Purification	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 5 (PE-Cy5) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Form/Format	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Applicable Applications for anti-CD34 antibody	FCM/FACS (Flow Cytometry)
Immunogen	Permanent human cell line derived from peripheral leucocytes of a patient suffering from chronic myeloid leukaemia.
Conjugation	PE-Cy5
Preparation and Storage	Store at 2-8 degree C. Protect from prolonged exposure to light. Do not freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Separation of human CD34 positive stem cells (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD34 (4H11[APG]) PE-Cy5 antibody (4ul reagent/100ul of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD34 (4H11[APG]) PE-Cy5 antibody (4ul reagent/100ul of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD34 antibody	CD34 is a highly glycosylated monomeric 111-115 kDa surface protein, which is present on many stem cell populations. It is a well established stem cell marker, though its expression on human hematopoietic stem cells is reversible. CD34 probably serves as a surface receptor that undergoes receptor-mediated endocytosis and regulates adhesion, differentiation and proliferation of hematopoietic stem cells and other progenitors. CD34 expression is likely to represent a specific state of hematopoietic development that may have altered adhering properties with expanding and differentiating capabilities in both in vitro and in vivo conditions.
References	*Krauter J, Hartl M, Hambach L, Kohlenberg A, Gunsilius E, Ganser A, Heil G: Receptor-mediated endocytosis of CD34 on hematopoietic cells after stimulation with the monoclonal antibody anti-HPCA-1. J Hematother Stem Cell Res. 2001 Dec;10(6):863-71., URL: http://www.ncbi.nlm.nih.gov/pubmed/11798512 ordina,*Dao MA, Arevalo J, Nolta JA: Reversibility of CD34 expression on human hematopoietic stem cells that retain the capacity for secondary reconstitution. Blood. 2003 Jan 1;101(1):112-8., URL: http://www.ncbi.nlm.nih.gov/pubmed/12393633 ordina,*Gangenahalli GU, Singh VK, Verma YK, Gupta P, Sharma RK, Chandra R, Gulati S, Luthra PM: Three-dimensional structure prediction of the interaction of CD34 with the SH3 domain of Crk-L. Stem Cells Dev. 2005 Oct;14(5):470-7., URL: http://www.ncbi.nlm.nih.gov/pubmed/16305332 ordina,*Gangenahalli GU, Singh VK, Verma YK, Gupta P, Sharma RK, Chandra R, Luthra PM: Hematopoietic stem cell antigen CD34: role in adhesion or homing. Stem Cells Dev. 2006 Jun;15(3):305-13., URL: http://www.ncbi.nlm.nih.gov/pubmed/16846369 ordina,*Elknerová K, Lacinová Z, Soucek J, Marinov I, Stockbauer P: Growth inhibitory effect of the antibody to hematopoietic stem cell antigen CD34 in leukemic cell lines. Neoplasma. 2007;54(4):311-20., URL: http://www.ncbi.nlm.nih.gov/pubmed/17822321 ?itool=,

NCBI AND UNIPROT INFORMATION

NCBI GI #	264769
NCBI GeneID	947
UniProt Accession #	P28906; Q15970; Q15971; Q5JTA3; Q5JTA4; Q9UJB1; A8K664
Molecular Weight	40,716 Da
NCBI Official Full Name	CD34
NCBI Official Synonym Full Names	CD34 molecule
NCBI Official Symbol	CD34
NCBI Protein Information	hematopoietic progenitor cell antigen CD34; CD34 antigen
UniProt Protein Name	Hematopoietic progenitor cell antigen CD34
UniProt Gene Name	CD34
UniProt Entry Name	CD34_HUMAN

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.