ARG62820
anti-CD34 antibody [4H11(APG)]

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [4H11(APG)] recognizes CD34
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, WB
Specificity	The clone 4H11(APG) reacts with Class III epitope on CD34 (Mucosialin), a 110-115 kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and on the most pluripotential stem cells; it is gradually lost on progenitor cells. 4H11(APG) completely blocks binding of Class II antibody QBEnd10 and Class III antibodies BIRMA K3 and 8G12 on KG1a cell line. HLDA VI; WS Code M MA58
Host	Mouse
Clonality	Monoclonal
Clone	4H11(APG)
Isotype	IgG1
Target Name	CD34
Species	Human
Immunogen	Permanent human cell line derived from peripheral leucocytes of a patient suffering from chronic myeloid leukaemia.
Conjugation	Un-conjugated
Alternate Names	Hematopoietic progenitor cell antigen CD34; CD antigen CD34

Application Instructions

Application table

Application	Dilution
FACS	2 µg/ml
ICC/IF	Assay-dependent
IHC-P	10 µg/ml
WB	1 - 2 µg/ml

Application Note: WB: Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer.
Application note: Non-reducing condition.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: WB: Positive control: Kg-1a human leukemia cells. Negative control: Jurkat.
IHC-P: Positive control: Placenta endothelium.

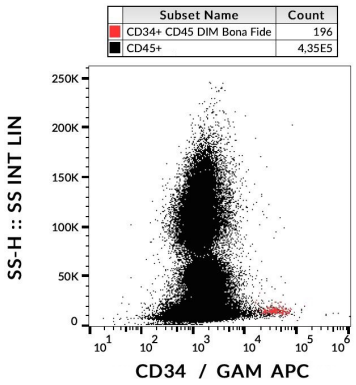
Properties

Form	Liquid
Purification	Purified from ascites by precipitation methods.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 947 Human Swiss-port # P28906 Human
Gene Symbol	CD34
Gene Full Name	CD34 molecule
Background	CD34 protein may play a role in the attachment of stem cells to the bone marrow extracellular matrix or to stromal cells. This single-pass membrane protein is highly glycosylated and phosphorylated by protein kinase C. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]
Function	CD34 is a 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. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30306 Pro-B Cell Marker Antibody panel (CD19, CD34, CD38, CD40, CD45) (FACS) Related products: CD34 antibodies; CD34 ELISA Kits; CD34 Duos / Panels; Anti-Mouse IgG secondary antibodies;
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Controls and Markers antibody; Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Pro-B Cell Marker antibody; Endothelial Cell Marker antibody; Angiogenesis Study antibody
Calculated Mw	41 kDa
PTM	Highly glycosylated. Phosphorylated on serine residues by PKC.

Images



ARG62820 anti-CD34 antibody [4H11(APG)] FACS image

Flow Cytometry: Human peripheral blood stained with ARG62820 anti-CD34 antibody [4H11(APG)], followed by incubation with APC labelled Goat anti-Mouse secondary antibody. CD34+ cells (red); CD45+ cells (black).