

Product datasheet for **AM20322PU-T**

CD34 Mouse Monoclonal Antibody [Clone ID: ICO-115]

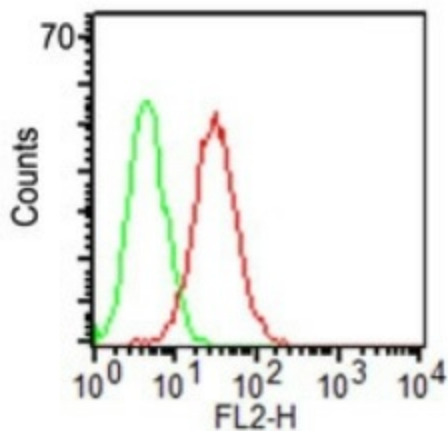
Product data:

Product Type:	Primary Antibodies
Clone Name:	ICO-115
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	Flow Cytometry: 0.5 µg/10 ⁶ cells (CS). Immunofluorescence: 0.5-1 µg/ml. Western Blot: 0.25-0.5 µg/ml. Immunoprecipitation: 0.5-1 µg/500 µg protein lysate. Immunohistochemistry on Frozen Sections: 0.25-0.5 µg/ml for 30 minutes at RT. <i>ICO-115</i> can be applied for immunophenotyping of leukemia cells on frozen tissue sections and for stem cell separation. Positive Control: KG-1 cells, Tonsil, or Angiosarcoma.
Reactivity:	Human, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Blast cells from a chronic myeloid leukemia patient.
Specificity:	This antibody clone <i>ICO-115</i> detects CD34 selectively expressed on haemopoietic progenitor cells, vascular endothelium and some tissue fibroblasts. <i>ICO-115</i> have been characterized on the V th international workshop on human differentiation antigens. This antibody recognizes a single chain, transmembrane, heavily glycosylated protein of 90-120kDa, which is identified as CD34. Its expression is a hallmark for identifying pluripotent hematopoietic stem or progenitor cells. Its expression is gradually lost as lineage committed progenitors differentiate. CD34 is a marker of choice for staining blasts in acute myeloid leukemia. In addition, it is expressed by soft tissue tumors, such as solitary fibrous tumor and gastrointestinal stromal tumor. CD34 expression is also found in vascular endothelium. Additionally, it appears that proliferating endothelial cells overexpress this molecule than the non-proliferating endothelial cells. Anti-CD34 labels > 85% of angiosarcoma and Kaposi's sarcoma, but shows low specificity. Cellular Localization: Cell surface.



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Formulation:	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Protein A/G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	90-110 kDa
Gene Name:	CD34 molecule
Database Link:	Entrez Gene 947 Human P28906
Background:	<p>CD34 is a type I transmembrane glycoprotein (Mr = 104-120 kDa) expressed on stem cells, early hematopoietic progenitor cells, bone marrow stroma cells, endothelial cells, embryonic fibroblasts, and neurons. CD34 analysis can be used for the differential identification of acute leukemias as well as routine analysis of cultured stem cell lines.</p> <p>CD34 a type 1 transmembrane protein, belonging to the sialomucin family, has important roles in adhesion which remain to be fully elucidated. CD34 has an intracellular cytoplasmic domain containing consensus sites for serine, threonine, tyrosine and active protein kinase C (PKC) phosphorylation thereby implicating a role for the protein in signal transduction processes. CD34 expression, as identified by antibody, is a hallmark for identifying pluripotential hematopoietic stem or progenitor cells. CD34 antibody positive populations expand and differentiate into the various lymphohematopoietic lineages. During differentiation, lineages lose CD34 expression and become CD34 antibody negative. CD34 is also expressed on vascular endothelium, bone marrow stroma, embryonic fibroblasts, and neurons and antibody to CD34 is also useful in analyzing these populations. Positive staining has also been described in a number of malignancies including various sarcomas and fibromas, preB-ALL, peripheral nerve sheath tumors, and papillary thyroid carcinoma. If certain kinds of tumors are characteristically positive for CD34 antibody staining such as Ewing's sarcoma, a CD34 antibody negative result may potentially rule out that particular tumor.</p>
Synonyms:	Hematopoietic progenitor cell marker

Product images:

Surface Flow Cytometric analysis of CD34 on KG-1 cells using CD34 antibody (red) and isotype control (green).