

## Product datasheet for **AM20322RP-N**

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

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	ICO-115
Applications:	FC, IF
Recommended Dilution:	<b>Flow Cytometry (Cell Surface):</b> 5 µl per test per one million cells (or 5 µl per 100 µl of whole blood). <b>Immunofluorescence:</b> 1/50-1/100. <b>Positive Control:</b> 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 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. <b>Cellular Localization:</b> cell surface.
Formulation:	10mM PBS Label: PE 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



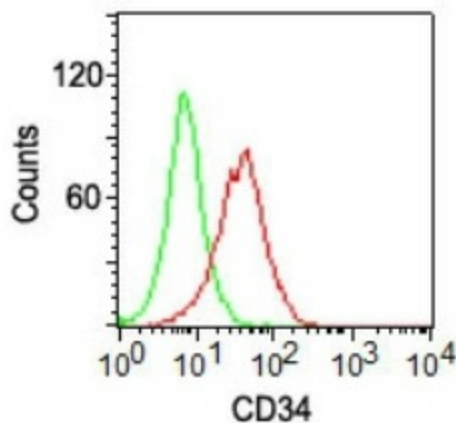
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Conjugation:	PE
Storage:	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b> This products is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	90-110 kDa
Gene Name:	CD34 molecule
Database Link:	<a href="#">Entrez Gene 947 Human P28906</a>

**Background:** 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.

**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) at 5  $\mu$ l/0.5  $\mu$ g/10<sup>6</sup> cells. PPI negative cell population was gated for analysis.