

APC Anti-Mouse CD34 Antibody[RAM34]

Catalog Number: E-AB-F1284UE

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Reactivity	Mouse
Host	Rat
Isotype	Rat IgG2a, κ
Clone No.	RAM34
Isotype Control	APC Rat IgG2a, κ Isotype Control[2A3] [Product E-AB-F09833E]
Conjugation	APC
Conjugation Information	APC is designed to be excited by the Red (627-640 nm) laser and detected using an optical filter centered near 660 nm (e.g., a 660/20 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

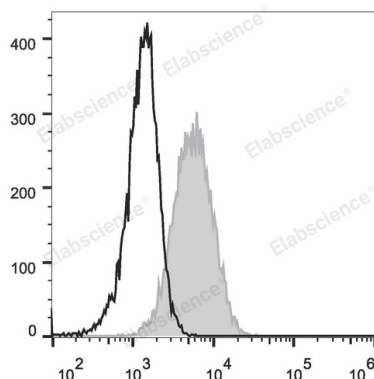
Applications

Recommended usage

FCM

Each lot of this antibody is quality control tested by flow cytometric analysis. Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use. We suggest each investigator should titrate the reagent to obtain optimal results [The recommended concentration is 0.1-1 μg/10⁶ cells in 100 μL volume].

Data



C57BL/6 murine splenocytes are stained with Anti-CD34 APC antibody (filled gray histogram) or Rat IgG2a Isotype Control APC (empty black histogram).

Preparation & Storage

Storage	Keep as concentrated solution. This product can be stored at 2-8°C for 12 months. Please protected from prolonged exposure to light and do not freeze.
Shipping	Ice bag

Antigen Information

Alternate Names	Hematopoietic progenitor cell antigen CD34
Uniprot ID	Q64314
Gene ID	12490

For Research Use Only

Background

The RAM34 antibody reacts with the CD34 glycoprotein on the surface of three independently derived mouse CD34-transfected cell lines. RAM34 antibody also reacts with the mouse cell lines PA6, 416B, Swiss 3T6, NIH, 3T3, DA1, and M1, all of which are positive for expression of mouse CD34 mRNA. Cell lines shown to be negative for CD34 transcript, including WEHI-3B, EL4, 18.8, and CMT64/61, are also negative for surface expression of CD34 as determined by RAM34 staining. Normal thymocytes and splenocytes are negative for CD34 expression. In the bone marrow, 7-10% of cells are stained with RAM34 mAb, including most of the Ly-6A/E (Sca-1)⁺ CD90 (Thy-1)^{low} Lineage Marker- hematopoietic stem cell-enriched subpopulation and myeloerythroid progenitors. CD34 is also expressed on a small percentage of fetal liver cells, including NK-cell progenitors. CD34 has been reported to be expressed on the endothelium of capillaries and, in this form, to function as a ligand for L-selectin. Consistent with this observation, RAM34 antibody stains endothelial cells in spleen, thymus, and postcapillary HEVs in the lymph nodes. It is reported that RAM34 antibody can be used to select CD34⁺ CD117 (c-Kit)⁺ Ly-6A/E (Sca-1)⁺ Lineage Marker- bone marrow-derived hematopoietic stem cells, capable of short-term multi-lineage reconstitution of lethally irradiated mice; while the CD34⁻ CD117⁺ Sca-1⁺ Lineage Marker- population contains self-renewing hematopoietic stem cells. Similarly, the bone marrow population with high dye-efflux capacity and which is highly enriched for long-term reconstituting hematopoietic stem cells is CD34⁻ CD117 (c-Kit)⁺ Ly-6A/E (Sca-1)⁺ Lineage Marker-.