

CD34 Monoclonal Antibody (RAM34), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Fish, Mouse, Human, Goat
Host/Isotope	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	RAM34
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_467210

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	58 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	6 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	3 Publications
Functional Assay (FN)	-	1 Publication
Immunocytochemistry (ICC)	-	1 Publication
Immunofluorescence (IF)	-	20 Publications
Immunohistochemistry (IHC)	-	15 Publications

Product Specific Information

Description: The RAM34 monoclonal antibody reacts with mouse CD34, also known as mucosialin. It has been reported that the RAM34 antibody can be used to detect CD34+Sca-1+c-Kit+ cells. CD34 is a highly glycosylated (approximately 90-120 kDa) member of the sialomucin family and is expressed by capillary endothelial cells, bone marrow stroma, and a small subpopulation of mouse bone marrow cells. RAM34 has been used to purify mouse hematopoietic stem cells (HSC) to near homogeneity. CD34 expressed on endothelial cells is a ligand for CD62L and plays a role in adhesion. Simultaneous staining of mouse bone marrow cells with a cocktail of antibodies to lineage markers (CD3, CD11b, Ly6G, TER-119 and CD45R/B220) reveals a subset of cells that stain with the RAM34 antibody and express undetectable to low levels of the indicated lineage markers.

Applications Reported: This RAM34 antibody has been reported for use in flow cytometric analysis, immunohistology staining of frozen tissue sections (acetone-fixed only, not formalin-fixed), and immunohistology staining of paraffin embedded tissue sections.

Applications Tested: This RAM34 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be

used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest. (Fluorochrome-conjugated RAM34 is recommended for use in flow cytometry).

Note: When staining with the RAM34 antibody an incubation time of 90 minutes is recommended to obtain the optimal signal to noise ratio.

For more detailed information on staining with RAM34, please refer to Ema et al., listed under References.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Immunohistochemistry (15)

Cell and bioscience

14-3-3 loss leads to neonatal lethality by microRNA-126 downregulation-mediated developmental defects in lung vasculature.

"Published figure using CD34 monoclonal antibody (Product # 14-0341-82) in Immunohistochemistry"

Authors: Yang J, Joshi S, Wang Q, Li P, Wang H, Xiong Y, Xiao Y, Wang J, Parker-Thornburg J, Behringer RR, Yu D

Species
Not Applicable

Dilution
Not Cited

Year
2020

American journal of cancer research

14-3-3 loss impedes oncogene-induced mammary tumorigenesis and metastasis by attenuating oncogenic signaling.

"Published figure using CD34 monoclonal antibody (Product # 14-0341-82) in Immunohistochemistry"

Authors: Joshi S, Yang J, Wang Q, Li P, Wang H, Zhang Q, Xiong Y, Pickering BF, Parker-Thornburg J, Behringer RR, Yu D

Species
Not Applicable

Dilution
Not Cited

Year
2019

[View more IHC references on thermofisher.com](#)

Flow Cytometry (58)

Stem cell reports

Proteinase 3 Limits the Number of Hematopoietic Stem and Progenitor Cells in Murine Bone Marrow.

"Published figure using CD34 monoclonal antibody (Product # 14-0341-82) in Flow Cytometry"

Authors: Karatepe K, Zhu H, Zhang X, Guo R, Kambara H, Loison F, Liu P, Yu H, Ren Q, Luo X, Manis J, Cheng T, Ma F, Xu Y, Luo HR

Species
Not Applicable

Dilution
Not Cited

Year
2018

Nature communications

JunB defines functional and structural integrity of the epidermal pilosebaceous unit in the skin.

"Published figure using CD34 monoclonal antibody (Product # 14-0341-82) in Flow Cytometry"

Authors: Singh K, Camera E, Krug L, Basu A, Pandey RK, Munir S, Wlaschek M, Kochanek S, Schorpp-Kistner M, Picardo M, Angel P, Niemann C, Maity P, Scharfetter-Kochanek K

Species
Not Applicable

Dilution
Not Cited

Year
2018

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

IF (20) IHC (F) (6) IHC (P) (3) FN (1) ICC (1)

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