

CD9 Monoclonal Antibody (eBioKMC8 (KMC8)), PE, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioKMC8 (KMC8)
Conjugate	PE
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_891498

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	10 Publications

Product Specific Information

Description: The eBioKMC8 monoclonal antibody reacts with mouse CD9, a 24 kDa member of the transmembrane 4 superfamily. This family is characterized by the presence of four hydrophobic domains spanning the cell membrane and short N- and C-terminal cytoplasmic domains. CD9 is expressed by several cell types including monocytes, macrophages, platelets, early B cells, activated B and T cells, dendritic cells, eosinophils, basophils, endothelial cells, myoblasts and neuroblasts. On T cells, CD9 functions as a co-stimulatory molecule on naive T cells. Furthermore, CD9 is expressed in oocytes, and CD9-deficiency results in sterility caused by defective gamete fusion. In mouse macrophages, CD9 functionally associates with FcγR3 to modify signals for phagocytosis and inflammatory responses. In mouse B cells, it was discovered that CD9 is a marker for marginal zone B cells, B1 cells, and plasma cells. In dendritic cells, recently it was demonstrated that CD9 facilitates the association of heterologous MHC II molecules. The level of CD9 expression is subject to donor variability.

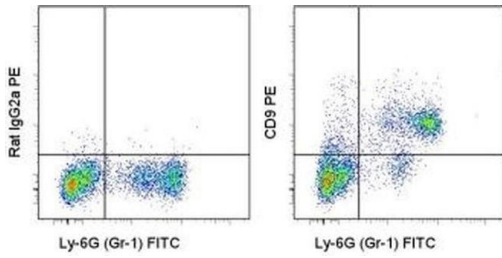
Applications Reported: This eBioKMC8 (KMC8) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioKMC8 (KMC8) antibody has been tested by flow cytometric analysis of mouse splenocytes and bone marrow. This can be used at less than or equal to 0.5 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.

Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD9 Monoclonal Antibody (eBioKMC8 (KMC8)), PE, eBioscience™



CD9 Antibody (12-0091-81) in Flow

Staining of C57Bl/6 bone marrow cells with Anti-Mouse Ly-6G (Gr-1) FITC (Product # 11-5931-82) and 0.25 µg of Rat IgG2a kappa Isotype Control PE (Product # 12-4321-80) (left) or Anti-Mouse CD9 PE (right). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

11 References

Immunocytochemistry (1)

Experimental hematology

Development of membrane mechanical function during terminal stages of primitive erythropoiesis in mice.

"12-0091 was used in Immunocytochemistry to examine the mechanical properties of primitive erythroblasts to determine how their mechanical development differs from that of definitive erythroid cells."

Authors: Waugh RE,Huang YS,Arif BJ,Bauserman R,Palis J

Species
Mouse

Dilution
Not Cited

Year
2013

Flow Cytometry (10)

Cell discovery

A bioenergetic shift is required for spermatogonial differentiation.

"Published figure using CD9 monoclonal antibody (Product # 12-0091-81) in Flow Cytometry"

Authors: Chen W,Zhang Z,Chang C,Yang Z,Wang P,Fu H,Wei X,Chen E,Tan S,Huang W,Sun L,Ni T,Yang Y,Wang Y

Species
Not Applicable

Dilution
Not Cited

Year
2021

Nature communications

LRIG1 is a gatekeeper to exit from quiescence in adult neural stem cells.

"Published figure using CD9 monoclonal antibody (Product # 12-0091-81) in Flow Cytometry"

Authors: Marqués-Torrejón MÁ,Williams CAC,Southgate B,Alfazema N,Clements MP,Garcia-Diaz C,Blin C,Arranz-Emparan N,Fraser J,Gammoh N,Parrinello S,Pollard SM

Species
Not Applicable

Dilution
Not Cited

Year
2021

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

More applications with references on thermofisher.com

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