

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	eBioKMC8 (KMC8)
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_823138

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	4 Publications
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	1 µg/test	6 Publications
ELISA (ELISA)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

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, and immunoblotting (WB) (non-reducing).

Applications Tested: This eBioKMC8 (KMC8) antibody has been tested by flow cytometric analysis of mouse splenocytes and 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

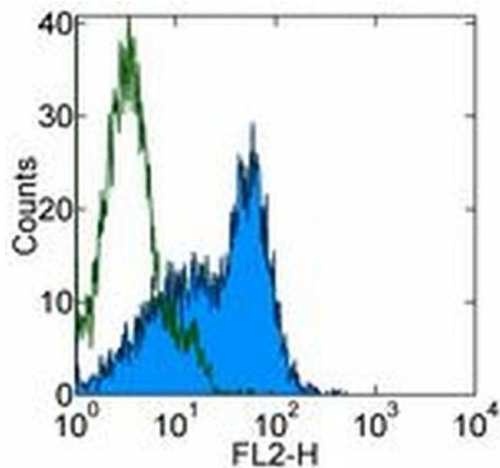
stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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

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

Filtration: 0.2 μ m post-manufacturing filtered.

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



CD9 Antibody (14-0091-82) in Flow

Staining of C57Bl/6 bone marrow cells with 0.5 μ g of Rat IgG2a Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.5 μ g of Anti-Mouse CD9 Purified (filled histogram) followed by Anti-Rat IgG PE (Product # 12-4822). Cells in the large scatter population were used for analysis.

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

15 References

Western Blot (4)

International journal of molecular sciences

Tuberous Sclerosis Complex Axis Controls Renal Extracellular Vesicle Production and Protein Content.

"14-0091-82 was used in Western Blot to demonstrate that the loss of Tsc2 gene function significantly increaseS the production of extracellular vesicles (EVs)."

Authors: Zadjali F,Kumar P,Yao Y,Johnson D,Astrinidis A,Vogel P,Gross KW,Bissler JJ

Species
Mouse

Dilution
1:500

Year
2020

Nature communications

UBL3 modification influences protein sorting to small extracellular vesicles.

"Published figure using CD9 monoclonal antibody (Product # 14-0091-82) in Western Blot"

Authors: Ageta H,Ageta-Ishihara N,Hitachi K,Karayel O,Onouchi T,Yamaguchi H,Kahyo T,Hatanaka K,Ikegami K,Yoshioka Y,Nakamura K,Kosaka N,Nakatani M,Uezumi A,Ide T,Tsutsumi Y,Sugimura H,Kinoshita M,Ochiya T,Mann M,Setou M,Tsuchida K

Species
Not Applicable

Dilution
Not Cited

Year
2018

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

Immunocytochemistry (3)

Journal of cell science

Fibroblastic reticular cell response to dendritic cells requires coordinated activity of podoplanin, CD44 and CD9.

"14-0091-82 was used in Immunocytochemistry to show a multi-faceted FRC response to DCs, which requires CD44 and CD9 in addition to podoplanin."

Authors: de Winde CM,Makris S,Millward LJ,Cantoral-Rebordinos JA,Benjamin AC,Martínez VG,Acton SE

Species
Mouse

Dilution
1:200

Year
2021

Nature communications

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

"Published figure using CD9 monoclonal antibody (Product # 14-0091-82) 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 ICC/IF references on thermofisher.com](#)

More applications with references on thermofisher.com

Flow (6)

ELISA (1)

Misc (1)

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