

# CD9 Monoclonal Antibody (eBioKMC8 (KMC8)), Alexa Fluor™ 700, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Alexa Fluor™ 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioKMC8 (KMC8)
Conjugate	Alexa Fluor™ 700
Excitation/Emission Max	696/719 nm
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_2815222

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	7 Publications
ELISA (ELISA)	-	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 FcγR3s 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.

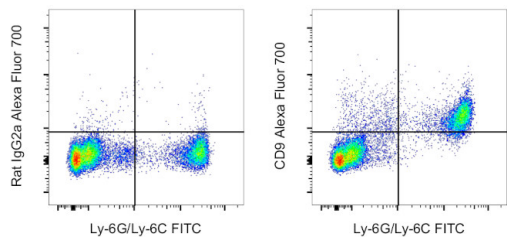
**Applications Reported:** This eBioKMC8 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This eBioKMC8 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This may 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Alexa Fluor 700 emits at 723 nm and can be excited with the red laser (633-647 nm). Most instruments will require a 685 LP mirror and 710/20 band pass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser

**Product Images For CD9 Monoclonal Antibody (eBioKMC8 (KMC8)), Alexa Fluor™ 700, eBioscience™**



**CD9 Antibody (56-0091-82) in Flow**  
C57BL/6 mouse bone marrow cells were stained with Ly-6G/Ly-6C Monoclonal Antibody, FITC (Product # 11-5931-82) and 0.25 µg of Rat IgG2a kappa Isotype Control, Alexa Fluor 700 (Product # 56-4321-80) (left) or 0.25 µg of CD9 Monoclonal Antibody, Alexa Fluor 700 (right). Total cells were used for analysis.

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

## 10 References

### Immunohistochemistry (1)

Disease models & mechanisms

#### Modelling glioblastoma tumour-host cell interactions using adult brain organotypic slice co-culture.

"Published figure using CD9 monoclonal antibody (Product # 56-0091-82) in Immunohistochemistry"

Authors: Marques-Torres MA, Gangoso E, Pollard SM

Year  
2018

### Immunocytochemistry (1)

Nature communications

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

"Published figure using CD9 monoclonal antibody (Product # 56-0091-82) in Immunocytochemistry"

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

Year  
2021

### Flow Cytometry (7)

Cell discovery

#### A bioenergetic shift is required for spermatogonial differentiation.

"Published figure using CD9 monoclonal antibody (Product # 56-0091-82) 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

Year  
2023

Molecular therapy. Nucleic acids

#### Extracellular vesicles mediated exocytosis of antisense peptide nucleic acids.

"Published figure using CD9 monoclonal antibody (Product # 56-0091-82) in Flow Cytometry"

Authors: Malik S, Saltzman WM, Bahal R

Year  
2021

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

### More applications with references on thermofisher.com

### ELISA (1)

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