

CD9 Monoclonal Antibody (eBioKMC8 (KMC8)), Super Bright™ 600, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioKMC8 (KMC8)
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762654

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	1 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 KMC8 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This KMC8 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This may 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.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

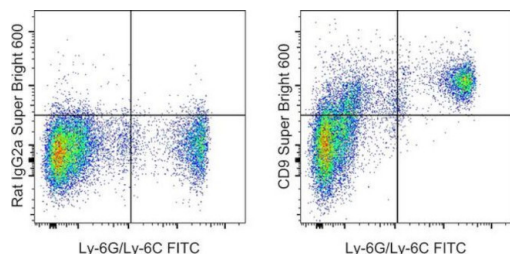
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD9 Monoclonal Antibody (eBioKMC8 (KMC8)), Super Bright™ 600, eBioscience™



CD9 Antibody (63-0091-82) in Flow

BALB/c mouse bone marrow cells were stained with Ly-6G/Ly-6C Monoclonal Antibody, FITC (Product # 11-5931-82) and 1 μ g of Rat IgG2a kappa Isotype Control, Super Bright 600 (Product # 63-4321-82) (left) or 1 μ g of CD9 Monoclonal Antibody, Super Bright 600 (right). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.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 # 63-0091-82) 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 # 63-0091-82) 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

Year
2021

Flow Cytometry (7)

Cell discovery

A bioenergetic shift is required for spermatogonial differentiation.

"Published figure using CD9 monoclonal antibody (Product # 63-0091-82) 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 # 63-0091-82) 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)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.