

Anti-Mouse CD9 FITC


Catalog Number: 11-0091

Also Known As: MIC3, Tspan29

RUO: For Research Use Only

Product Information

Contents: Anti-Mouse CD9 FITC

 Catalog Number: 11-0091

Clone: eBioKMC8 (KMC8)

Concentration: 0.5 mg/ml

Host/Isotype: Rat IgG2a, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

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 naïve 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 FcγRs 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 1 μ g per test. A test is defined as the amount (μ g) 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.

References

Miyake K, Medina KL, Hayashi S, Ono S, Hamaoka T, Kincade PW. Related Articles, Links Monoclonal antibodies to Pgp-1/CD44 block lymphohemopoiesis in long-term bone marrow cultures. *J Exp Med*. 1990 Feb 1;171(2):477-88. (KMC8, mAb development, PubMed)

Oritani K, Wu X, Medina K, Hudson J, Miyake K, Gimble JM, Burstein SA, Kincade PW. Antibody ligation of CD9 modifies production of myeloid cells in long-term cultures. *Blood*. 1996 Mar 15;87(6):2252-61.

Tachibana I, Hemler ME. Role of transmembrane 4 superfamily (TM4SF) proteins CD9 and CD81 in muscle cell fusion and myotube maintenance. *J Cell Biol*. 1999 Aug 23;146(4):893-904. (KMC8, WB, IP, FA, PubMed)

Related Products

11-0098 Anti-Human CD9 FITC (eBioSN4 (SN4 C3-3A2))

11-4321 Rat IgG2a K Isotype Control FITC

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