

Datasheet: MCA812F

BATCH NUMBER 163024

Description:	MOUSE ANTI RABBIT IgM (B CELL MARKER):FITC
Specificity:	IgM (B-CELL MARKER)
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	NRBM
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10
Immunofluorescence			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Rabbit		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

**External Database
Links**

UniProt:

[P04221](#) [Related reagents](#)
[P03988](#) [Related reagents](#)

Fusion Partners Spleen cells from immunized mice were fused with cells of the Mouse P3X63Ag8.653 myeloma cell line.

Specificity **Mouse anti Rabbit IgM (B Cell Marker) antibody, clone NRBM** recognizes rabbit IgM.

Mammalian IgM is produced and secreted by plasma cells located in bone marrow, lymph nodes and spleen. IgM is present in both a secreted polymeric form and as cell surface monomeric form on B cells.

Mouse anti Rabbit IgM antibody, clone NRBM labels IgM⁺ B cells ([Dewals et al. 2011](#), [Waclavicek et al. 2009](#)) and as such can be considered a reliable marker of lagomorph B cells for flow cytometry.

Flow Cytometry Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

References

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2. Dewals, B. *et al.* (2008) Malignant catarrhal fever induced by alcelaphine herpesvirus 1 is associated with proliferation of CD8+ T cells supporting a latent infection. [PLoS One 3: e1627.](#)
3. Gillet, L. *et al.* (2009) Anchoring tick salivary anti-complement proteins IRAC I and IRAC II to membrane increases their immunogenicity. [Vet Res. 40: 51.](#)
4. Stich, N. *et al.* (2010) Staphylococcal superantigen (TSST-1) mutant analysis reveals that t cell activation is required for biological effects in the rabbit including the cytokine storm. [Toxins \(Basel\). 2 \(9\): 2272-88.](#)
5. Waclavicek, M. *et al.* (2009) Analysis of the early response to TSST-1 reveals Vbeta-unrestricted extravasation, compartmentalization of the response, and unresponsiveness but not anergy to TSST-1. [J Leukoc Biol. 85 \(1\): 44-54.](#)
6. Anderson, I.E. *et al.* (2008) Production and utilization of interleukin-15 in malignant catarrhal fever. [J Comp Pathol. 138: 131-44.](#)
7. Dewals, B.G. and Vanderplasschen, A. (2011) Malignant catarrhal fever induced by Alcelaphine herpesvirus 1 is characterized by an expansion of activated CD3+CD8+CD4- T cells expressing a cytotoxic phenotype in both lymphoid and non-lymphoid tissues. [Vet Res. 42: 95.](#)
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9. Milanovic, V. *et al.* (2017) Histological and immunological changes in uterus during the different reproductive stages at Californian rabbit (*Oryctolagus cuniculus*). [Kafkas Univ Vet Fak Derg. 23, 137-44.](#)
10. Ondruska, L. *et al.* (2016) Decrease in C-reactive protein levels in rabbits after vaccination with a live attenuated myxoma virus vaccine. [Veterinární Medicína. 61 \(No. 10\): 571-6.](#)

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12. Sorel, O. *et al.* (2017) Macavirus latency-associated protein evades immune detection through regulation of protein synthesis in cis depending upon its glycin/glutamate-rich domain. [PLoS Pathog. 13 \(10\): e1006691.](#)
13. Jeklova, E. *et al.* (2020) Characterization of humoral and cell-mediated immunity in rabbits orally infected with *Encephalitozoon cuniculi*. [Vet Res. 51 \(1\): 79.](#)
14. Niedzwiedzka-Rystwej, P. *et al.* (2020) B and T lymphocytes in rabbits change according to the sex and throughout the year. [Pol J Vet Sci. 23 \(1\): 37-42.](#)
15. Muñoz-Silvestre, A. *et al.* (2020) Pathogenesis of Intradermal Staphylococcal Infections: Rabbit Experimental Approach to Natural *Staphylococcus aureus* Skin Infections. [Am J Pathol. 190 \(6\): 1188-210.](#)
16. Niedzwiedzka-Rystwej, P. *et al.* (2022) Reactivity of selected markers of innate and adaptive immunity in rabbits experimentally infected with antigenic variants of RHD (Lagovirus europaeus/GI.1a). [Vet Res Commun. 46 \(1\): 233-42.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA812F10041>

Regulatory For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
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