

# Datasheet: MCA812GA

Description:	MOUSE ANTI RABBIT IgM (B CELL MARKER)
Specificity:	IgM (B-CELL MARKER)
Format:	Purified
<b>Product Type:</b>	Monoclonal Antibody
Clone:	NRBM
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	<b>Suggested Dilution</b>
Flow Cytometry	•			
Immunohistology - Frozen	•			
Immunohistology - Paraffin			•	
ELISA			•	
Immunoprecipitation			•	
Western Blotting				

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 - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A supernatant	from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )	
Carrier Free	Yes	
Approx. Protein	IgG concentration 1.0mg/ml	

#### Concentrations

External	Database
Links	

### UniProt:

P04221 Related reagents
P03988 Related reagents

### **RRID**

AB 10961295

### **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<sup>+ve</sup> B cells (<u>Dewals et al. 2011</u>, <u>Waclavicek et al. 2009</u>) 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 1x10<sup>6</sup> cells in 100ul.

### References

- 1. Idogawa, H. *et al.* (1997) Progression of articular destruction and the production of tumour necrosis factor-alpha in antigen-induced arthritis in rabbits. <u>Scand J Immunol. 46</u> (6): 572-80.
- 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. <u>PLoS One 3: e1627.</u>
- 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. <u>Vet Res. 42: 95.</u>
- 8. Dewals, B. *et al.* (2011) Ex vivo bioluminescence detection of alcelaphine herpesvirus 1 infection during malignant catarrhal fever. <u>J Virol. 85: 6941-54.</u>
- 9. Milanovic, V. *et al.* (2017) Histological and immunological changes in uterus during the different reproductive stages at Californian rabbit (*Oryctolagus cuniculus*). <u>Kafkas Univ Vet</u>

### 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. <u>Veterinární Medicína. 61 (No. 10)</u>: 571-6.
- 11. Myster, F. *et al.* (2015) Viral semaphorin inhibits dendritic cell phagocytosis and migration but is not essential for gammaherpesvirus-induced lymphoproliferation in malignant catarrhal fever. <u>J Virol. 89 (7): 3630-47.</u>
- 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. Niedżwiedzka-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. Niedżwiedzka-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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA812GA">https://www.bio-rad-antibodies.com/SDS/MCA812GA</a> 10040
Regulatory	For research purposes only

### Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...)

Goat Anti Mouse IgG (STAR70...)

Rabbit Anti Mouse IgG (STAR13...)

Goat Anti Mouse IgG (Fc) (STAR120...)

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...)

Goat Anti Mouse IgG (STAR77...)

HRP

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

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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 'M430523:240516'

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