



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## MOUSE ANTI BOVINE ROTAVIRUS MR STRAIN

With HRP-conjugated Secondary Antibody

**Catalog No.**  
DS-MB-02267

**Target Species**  
Rat

**Isotype**  
IgG1

**Preparation:** Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Product Type:** Monoclonal Antibody

**Immunogen:** Rat thymocyte membrane glycoprotein

**Species Cross Reactivity:** Reacts with: Mouse **N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form:** Purified IgG - liquid

**Buffer Solution:** Phosphate buffered saline pH7.2

**Preservative Stabilizers:** 0.09% Sodium Azide

**Approx. Protein Concentrations:** IgG concentration 1.0 mg/ml

**Fusion Partners:** Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.

**Specificity:** recognizes a monomorphic determinant of the rat I-A antigen present on B lymphocytes, dendritic cells, some macrophages and certain epithelial cells. This antibody cross reacts with certain mouse strains of MHC haplotypes k and s. Analysis of recombinant mouse strains showed that the determinants mapped to the I-A region <sup>(1)</sup>.

This antibody does not react with the BDIX rat strain <sup>(6)</sup>.

Expression is polymorphic in mice.

This product is routinely tested in flow cytometry on rat splenocytes.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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**Flow Cytometry:** Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul. Method sheets are available on request.

**Immunohistology:** This product does not require antigen retrieval using heat treatment or protein digestion prior to staining of formalin-fixed paraffin-embedded sections, but results may be enhanced with heat treatment using 0.01M citrate buffer pH6. This clone has also been described reacting with paraffin-embedded material following PLP fixation (periodate-lysine-paraformaldehyde) <sup>(4)</sup>.

**Storage:** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

### Recommended Reading:

1. McMaster, W. R. and Williams, A. F. (1979) Identification of Ig glycoproteins in rat thymus and purification from rat spleen. *Eur. J. Immunol.* 9: 426-433.
2. Fernandez, J. L. and Weeks, M. (1986) Genetic monitoring of inbred strains of mice using monoclonal antibodies to major histocompatibility haplotypes and lymphocyte alloantigens. *Lab. Anim.* 20: 293-297.
3. Charteris, D. G. and Lightman, S. L. (1993) In vivo lymphokine production in experimental autoimmune uveoretinitis. *Immunology.* 78: 387-392.
4. Whiteland, J. L. *et al.* (1995) Immunohistochemical detection of T-cell subsets and other leucocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. *J. Histochem. Cytochem.* 43: 313-320.
5. McKechnie, N. M. *et al.* (1997) Immunization with the cross-reactive antigens Ov39 from *Onchocerca volvulus* and hr44 from human retinal tissue induces ocular pathology and activates retinal microglia. *J. Infect. Dis.* 176: 1334-1343.
6. Male, D. K. *et al.* (1987) Serological evidence for a defect in RT1. B (I-A) expression by the BDIX rat strain. *J. Immunogenet.* 14: 301-312.
7. Burrows, G. G. *et al.* (1998) Two-domain MHC class II molecules form stable complexes with myelin basic protein 69-89 peptide that detect and inhibit rat encephalitogenic T cells and treat experimental autoimmune encephalomyelitis. *J. Immunol.* 161: 5987-5996.

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### Applications

**Table Summary of antibody applications and working conditions**

| Options<br>Functions              | YES | NO | Not determined | Recommended<br>Work dilution or<br>concentration |
|-----------------------------------|-----|----|----------------|--|
| ELISA                             |     |    | .              |  |
| Western Blotting                  | .   |    |                |  |
| Immunohistology - frozen          | .   |    |                |  |
| Immunohistology –<br>paraffin (1) | .   |    |                | 1/50 - 1/100                                     |
| Immunohistology - resin           |     |    | .              |  |
| Immunoprecipitation               |     |    | .              |  |
| Flow Cytometry                    | .   |    |                | 1/50 - 1/100                                     |
| Immunofluorescence staining       |     |    | .              |  |
| Neutralization                    |     |    | .              |  |

*Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.*

### Secondary Antibody Applications

| Options<br>Functions                 | YES | NO | Not determined | Recommended<br>Work dilution or<br>concentration |
|--------------------------------------|-----|----|----------------|--|
| Immunoassay (ELISA,<br>Western blot) | .   |    |                | 1:5000-1:10000                                   |

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