Datasheet: MCA51R

**Description:** MOUSE ANTI RAT MHC CLASS I RT1A

**Specificity:** MHC CLASS I RT1A

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** OX-18

**Isotype:** IgG1

**Quantity:** 0.25 mg

### 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](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>✔</td>
<td></td>
<td></td>
<td>1/50 - 1/100</td>
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<tr>
<td>Immunohistology - Frozen (1)</td>
<td>✔</td>
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<tr>
<td>Immunohistology - Paraffin</td>
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<td>ELISA</td>
<td>✔</td>
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<tr>
<td>Immunoprecipitation</td>
<td>✔</td>
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<tr>
<td>Western Blotting</td>
<td>✔</td>
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</table>

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

(1) The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

**Target Species**

Rat

**Product Form**

Purified IgG - liquid

**Preparation**

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

**Buffer Solution**

Phosphate buffered saline
Preservative
Stabilisers
0.09% Sodium Azide

Carrier Free
Yes

Approx. Protein
Concentrations
IgG concentration 1.0 mg/ml

Immunogen
Rat spleen cell glycoproteins

RRID
AB_322394

Fusion Partners
Spleen cells from immunised BALB/c mice were fused with cells of the mouse
P3X63Ag8.653 myeloma cell line.

Specificity
Mouse anti Rat MHC Class I RT1A antibody, clone OX-18 recognizes a monomorphic
determinant of rat MHC Class I (RT1A), expressed by all rat strains. However, quantitative
measurements suggest that not all of the class I molecules are recognized.

Mouse anti Rat MHC Class I RT1A antibody, clone OX-18 has been used in
immunoaffinity purification of rat MHC class I molecules (Fukumoto et al. 1982).

Mouse anti Rat MHC Class I RT1A antibody, clone OX-18 is routinely tested in flow
cytometry on rat splenocytes.

Flow Cytometry
Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

Immunohistology
Acetone fixation recommended - the antigen is sensitive to fixation with
parafomaldehyde.

References
1. Fukumoto, T. et al. (1982) Mouse monoclonal antibodies against rat major
histocompatibility antigens. Two Ia antigens and expression of Ia and class I antigens in
and cell surface differentiation antigens with early rat pregnancy. Immunology, 52: 631-40
3. Osawa, H. et al. (1985) Inhibition of IL 2-dependent proliferation of rat T lymphoblasts
by the monoclonal antibody ART62 which reacts with MHC class 1 antigens. J Immunol.
5. Fujikawa, L.S. et al. (1989) Class II antigens on retinal vascular endothelium, pericytes,
molecules synthesized by different mechanisms in normal rat cells in vitro Human
Immunol. 59: 404-14
8. Edamura, M. et al. (2014) Functional deficiency of MHC class I enhances LTP and
abolishes LTD in the nucleus accumbens of mice. PLoS One. 9 (9): e107099.


**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**


**Regulatory**

For research purposes only

**Recommended Products**

**Recommended Secondary Antibodies**

- Goat Anti Mouse IgG (STAR77...) **HRP**
- Rabbit Anti Mouse IgG (STAR12...) **RPE**
- Goat Anti Mouse IgG (STAR70...) **FITC**
- Goat Anti Mouse IgG IgA IgM (STAR87...) **Alk. Phos., HRP**
- Goat Anti Mouse IgG (STAR76...) **RPE**
- Goat Anti Mouse IgG (H/L) (STAR117...) **Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP**
- Rabbit Anti Mouse IgG (STAR13...) **HRP**
- Goat Anti Mouse IgG (Fc) (STAR120...) **FITC, HRP**
- Rabbit Anti Mouse IgG (STAR9...) **FITC**

**Recommended Negative Controls**

**MOUSE IgG1 NEGATIVE CONTROL (MCA1209)**

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