

## Datasheet: MCA453GA

**BATCH NUMBER 1711**

<b>Description:</b>	MOUSE ANTI RAT TCR ALPHA/BETA
<b>Specificity:</b>	TCR ALPHA/BETA
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	R73
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			1/10 - 1/100
Immunohistology - Paraffin			▪	
Immunohistology - Resin			▪	
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. 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.

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	<p>Reacts with: Monkey, Cynomolgus monkey</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture

supernatant

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** 0.09% Sodium Azide

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**Carrier Free** Yes

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

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**Immunogen** Rat T Blasts and Erythrocytes.

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**RRID** AB\_567214

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**Fusion Partners** Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 mouse myeloma cell line.

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**Specificity** **Mouse anti Rat TCR alpha/beta antibody, clone R73** recognizes a constant determinant on the beta chain of the rat alpha/beta T cell receptor, expressed by 97% of peripheral rat T cells as defined by the OX-52 marker. R73 is mitogenic for unseparated spleen cells and for purified T cells. In the rat thymus, mature medullary cells express the R73 determinant at the same levels as peripheral T cells, whereas 94% of CD4 - CD8 - thymocytes are R73 negative.

Mouse anti Rat TCR alpha/beta antibody, clone R73 is reported to stimulate adhesion between Thymic Dendritic Cells and Thymocytes ([Colic et al. 2010](#)).

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 100ul of whole blood or 10<sup>6</sup> cells in 100ul. Method sheets are available on request.

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**References**

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13. Khalife, S. *et al.* (2016) Relationship Between *Pneumocystis carinii* Burden and the Degree of Host Immunosuppression in an Airborne Transmission Experimental Model. [J Eukaryot Microbiol. 63 \(3\): 309-17.](#)
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16. Ahn, M. *et al.* (2015) Immunohistochemical study of Krüppel-like factor 4 in the spinal cords of rats with experimental autoimmune encephalomyelitis. [Acta Histochem. 117 \(6\): 521-7.](#)
17. Jörns A *et al.* (2014) Anti-TCR therapy combined with fingolimod for reversal of diabetic hyperglycemia by  $\beta$  cell regeneration in the LEW.1AR1-iddm rat model of type 1 diabetes. [J Mol Med \(Berl\). 92 \(7\): 743-55.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA453GA>  
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**Regulatory**

For research purposes only

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## Related Products

## Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M367709:200529'

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