

Datasheet: MCA453EL

Description:	MOUSE ANTI RAT TCR ALPHA/BETA:Low Endotoxin
Specificity:	TCR ALPHA/BETA
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	R73
Isotype:	IgG1
Quantity:	0.5 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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			1/10 - 1/100
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Functional Assays	▪			

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.

Target Species	Rat
Species Cross Reactivity	<p>Reacts with: Monkey, Cynomolgus monkey</p> <p>N.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>
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	None present
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Rat T blasts and erythrocytes.
RRID	AB_322435
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63.Ag8.653 mouse myeloma cell line.
Specificity	<p>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.</p> <p>Mouse anti Rat TCR alpha/beta antibody, clone R73 is reported to stimulate adhesion between Thymic Dendritic Cells and Thymocytes (Colic et al. 2010).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 100ul of whole blood or 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Tomida, S. <i>et al.</i> (1994) Intercellular adhesion molecule-1 and leukocyte function-associated antigen-1 are involved in protection mediated by CD3+TCR alpha beta- T cells at the early stage after infection with <i>Listeria monocytogenes</i> in rats. Int Immunol. 6 (7): 955-61. Colić, M. <i>et al.</i> (1996) Mechanisms involved in the binding of thymocytes to rat thymic dendritic cells. Dev Immunol. 5 (1): 37-51. Kanellis, J. <i>et al.</i> (2010) JNK signalling in human and experimental renal ischaemia/reperfusion injury. Nephrol Dial Transplant. 25: 2898-908. Nave, H. <i>et al.</i> (2008) Resistance of Janus kinase-2 dependent leptin signaling in natural killer (NK) cells: a novel mechanism of NK cell dysfunction in diet-induced obesity. Endocrinology. 149: 3370-8. Tsuchida, M. <i>et al.</i> (1994) Identification of CD4- CD8- alpha beta T cells in the subarachnoid space of rats with experimental autoimmune encephalomyelitis. A possible route by which effector cells invade the lesions. Immunology. 81 (3): 420-7. Matsumoto, Y. <i>et al.</i> (1994) Successful prevention and treatment of autoimmune encephalomyelitis by short-term administration of anti-T-cell receptor alpha beta antibody. Immunology. 81 (1): 1-7. Pilipović, I. <i>et al.</i> (2010) Glucocorticoids, master modulators of the thymic

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Storage Store at -20° only.

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10162 available at: <https://www.bio-rad-antibodies.com/SDS/MCA453EL>
10162

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
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](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA1209EL\)](#)

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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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