

Datasheet: MCA2402

**BATCH NUMBER 169014**

<b>Description:</b>	RAT ANTI MOUSE ER-TR7
<b>Specificity:</b>	ER-TR7
<b>Other names:</b>	Collagen alpha-1(VI) chain
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ER-TR7
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.25 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)	▪			
Immunohistology - Frozen	▪			1/50 - 1/100
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

**(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Isolated C3H thymic stromal cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q04857</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">12833</a> Col6a1    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_915429
<b>Fusion Partners</b>	Cells from immunized rats were fused with cells of the mouse P3-X63-Ag8.563 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse ER-TR7 antibody, clone ER-TR7</b> recognizes ER-TR7, an antigen located in the cytoplasm of reticular fibroblasts, a component of the extracellular matrix of lymphoid and non-lymphoid organs.</p> <p>Rat anti Mouse ER-TR7 antibody, clone ER-TR7 recognizes collagen type VI (<a href="#">Schiavinato et al. 2021</a>) and has been used to stain the microanatomy of various organs and also stains subendothelial deposits in atherosclerotic plaques.</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100µl
<b>Histology Positive Control Tissue</b>	Mouse spleen
<b>References</b>	<ol style="list-style-type: none"> <li>1. Van Vliet, E. <i>et al.</i> (1986) Reticular fibroblasts in peripheral lymphoid organs identified by a monoclonal antibody. <a href="#">J Histochem Cytochem. 34 (7): 883-90.</a></li> <li>2. Kalled, S.L. <i>et al.</i> (1998) Anti-CD40 ligand antibody treatment of SNF1 mice with established nephritis: preservation of kidney function. <a href="#">J Immunol. 160: 2158-65.</a></li> <li>3. Katakai, T. <i>et al.</i> (2003) Th1-biased tertiary lymphoid tissue supported by CXC chemokine ligand 13-producing stromal network in chronic lesions of autoimmune gastritis. <a href="#">J Immunol. 171: 4359-68.</a></li> <li>4. Fujii, N. <i>et al.</i> (2006) Targeting of interstitial cells using a simple gene-transfer strategy. <a href="#">Nephrol Dial Transplant. 21: 2745-53.</a></li> <li>5. Mueller, S.N. <i>et al.</i> (2007) Viral targeting of fibroblastic reticular cells contributes to immunosuppression and persistence during chronic infection. <a href="#">Proc Natl Acad Sci U S A. 104:15430-5.</a></li> <li>6. Kumamoto, Y. <i>et al.</i> (2009) MGL2 Dermal dendritic cells are sufficient to initiate contact hypersensitivity in vivo. <a href="#">PLoS One. 4: e5619.</a></li> </ol>

7. Tumanov, A.V. *et al.* (2010) Cellular source and molecular form of TNF specify its distinct functions in organization of secondary lymphoid organs. [Blood. 116: 3456-64.](#)
8. Köhler, C.N. (2010) The actin-binding protein caldesmon is in spleen and lymph nodes predominately expressed by smooth-muscle cells, reticular cells, and follicular dendritic cells. [J Histochem Cytochem. 58 \(2\): 183-93.](#)
9. Umemoto, E. *et al.* (2012) Constitutive plasmacytoid dendritic cell migration to the splenic white pulp is cooperatively regulated by CCR7- and CXCR4-mediated signaling. [J Immunol. 189 \(1\): 191-9.](#)
10. Burrell, B.E. *et al.* (2015) Lymph Node Stromal Fiber ER-TR7 Modulates CD4+ T Cell Lymph Node Trafficking and Transplant Tolerance. [Transplantation. 99 \(6\): 1119-25.](#)
11. Bennett, K.M. *et al.* (2016) Induction of Colonic M Cells during Intestinal Inflammation. [Am J Pathol. 186 \(5\): 1166-79.](#)
12. Watanabe, R. *et al.* (2016) Formation of fibroblastic reticular network in the brain after infection with neurovirulent murine coronavirus. [Neuropathology. 36 \(6\): 513-26.](#)
13. Marrero, L. *et al.* (2017) Fibroblast reticular cells engineer a blastema extracellular network during digit tip regeneration in mice. [Regeneration \(Oxf\). 4 \(2\): 69-84.](#)
14. Hwang, I.Y. *et al.* (2017) Normal Thymocyte Egress, T Cell Trafficking, and CD4<sup>+</sup> T Cell Homeostasis Require Interactions between RGS Proteins and Gα<sub>i2</sub>. [J Immunol. 198 \(7\): 2721-2734.](#)
15. Dawson, L.A. *et al.* (2021) Proximal digit tip amputation initiates simultaneous blastema and transient fibrosis formation and results in partial regeneration. [Wound Repair Regen. 29 \(1\): 196-205.](#)
16. Finetti, F. *et al.* (2020) Optimization of Organotypic Cultures of Mouse Spleen for Staining and Functional Assays. [Front Immunol. 11: 471.](#)

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**Further Reading**

1. Lokmic, Z. *et al.* (2008) The extracellular matrix of the spleen as a potential organizer of immune cell compartments. [Semin Immunol. 20: 4-13.](#)
2. Schiavinato, A. *et al.* (2021) Collagen type VI is the antigen recognized by the ER-TR7 antibody. [Eur J Immunol. 51 \(9\): 2345-7.](#)

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**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.

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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/MCA2402>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

## Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

<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)  
'M415022:221215'

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