

# Datasheet: MCA1615T

**BATCH NUMBER 150976**

<b>Description:</b>	MOUSE ANTI HUMAN CD54
<b>Specificity:</b>	CD54
<b>Other names:</b>	ICAM-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	15.2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	20 µg

## 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	▪			1/50 - 1/100
Immunohistology - Paraffin	▪			

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>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Pig</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 A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human monocytes
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P05362</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3383</a>    ICAM1    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_324646
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0-Ag14 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human CD54 antibody, clone 15.2</b> recognizes the human CD54 cell surface antigen also known as intracellular Adhesion Molecule -1 (ICAM-1) or Major group rhinovirus receptor.</p> <p>CD54 is expressed by many cells following activation by inflammatory mediators. It is a 505 amino acid with an additional 27 amino acid signal peptide ~90 kDa single pass type I transmembrane glycoprotein bearing 5 Ig-like C2-type domains.</p> <p>Mouse anti Human CD54 antibody, clone 15.2 blocks CD54 function (<a href="#">Berendt <i>et al.</i> 1992</a>). Mouse anti Human CD54 antibody, clone 15.2 binds to an epitope on the N-terminal Ig-like domain within a region designated the L43 loop (<a href="#">Chakravorty and Craig 2005</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Human Tonsil
<b>References</b>	<ol style="list-style-type: none"> <li>1. Dransfield, I. <i>et al.</i> (1992) Interaction of leukocyte integrins with ligand is necessary but not sufficient for function. <a href="#">J Cell Biol. 116:1527-35.</a></li> <li>2. Berendt, A. <i>et al.</i> (1992) The binding site on ICAM-1 for plasmodium falciparum-infected erythrocytes overlaps, but is distinct from, the LFA-1- binding site. <a href="#">Cell. 68: 71-81.</a></li> <li>3. Urquhart, P. <i>et al.</i> (2007) Carbon monoxide-releasing molecules modulate leukocyte-endothelial interactions under flow. <a href="#">J Pharmacol Exp Ther. 321 (2): 656-62.</a></li> <li>4. Baratin, M. <i>et al.</i> (2007) Dissection of the role of PfEMP1 and ICAM-1 in the sensing of <i>Plasmodium-falciparum</i>-infected erythrocytes by natural killer cells. <a href="#">PLoS One 2: e228.</a></li> <li>5. van Buul, J.D. <i>et al.</i> (2010) Inside-out regulation of ICAM-1 dynamics in TNF-alpha-activated endothelium. <a href="#">PLoS One 5: e11336.</a></li> </ol>

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18. Sugden SM *et al.* (2017) HIV-1 Vpu Downmodulates ICAM-1 Expression, Resulting in Decreased Killing of Infected CD4<sup>+</sup> T Cells by NK Cells. [J Virol. 91 \(8\): pii: e02442-16.](#)
19. Lennartz, F. *et al.* (2015) Mapping the Binding Site of a Cross-Reactive *Plasmodium falciparum* PfEMP1 Monoclonal Antibody Inhibitory of ICAM-1 Binding. [J Immunol. 195 \(7\): 3273-83.](#)

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1615T">https://www.bio-rad-antibodies.com/SDS/MCA1615T</a></p> <p>10040</p>

## 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>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</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>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<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)  
'M365554:200529'

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