

## Datasheet: MCA1615EL

<b>Description:</b>	MOUSE ANTI HUMAN CD54:Low Endotoxin
<b>Specificity:</b>	CD54
<b>Other names:</b>	ICAM-1
<b>Format:</b>	Low Endotoxin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	15.2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen	▪			
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

Human

### Species Cross Reactivity

Reacts with: Pig

**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.

### Product Form

Purified IgG - liquid

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** None present

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**Carrier Free** Yes

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**Endotoxin Level** < 0.01 EU/ug

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

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**Immunogen** Human monocytes

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**External Database Links**

**UniProt:**

[P05362](#) [Related reagents](#)

**Entrez Gene:**

[3383](#) ICAM1 [Related reagents](#)

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**RRID** AB\_2264493

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**Fusion Partners** Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0-Ag14 myeloma cell line

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**Specificity** **Mouse anti Human CD54 antibody, clone 15.2** recognizes the human CD54 cell surface antigen also known as intracellular Adhesion Molecule -1 (ICAM-1) or Major group rhinovirus receptor.

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.

Mouse anti Human CD54 antibody, clone 15.2 blocks CD54 function ([Berendt et al. 1992](#)). 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 ([Chakravorty and Craig 2005](#)).

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

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**References**

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2. Berendt, A. *et al.* (1992) The binding site on ICAM-1 for plasmodium falciparum-infected erythrocytes overlaps, but is distinct from, the LFA-1- binding site. [Cell. 68: 71-81.](#)
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4. Baratin, M. *et al.* (2007) Dissection of the role of PfEMP1 and ICAM-1 in the sensing of

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  14. Lask, A. *et al.* (2011) TCR-independent killing of B cell malignancies by anti-third-party CTLs: the critical role of MHC-CD8 engagement. [J Immunol. 187 \(4\): 2006-14.](#)
  15. Sommaggio, R. *et al.* (2012) Multiple Receptors Trigger Human NK Cell-Mediated Cytotoxicity against Porcine Chondrocytes. [J Immunol. 188: 2075-83.](#)
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  17. Sumagin R *et al.* (2014) Transmigrated neutrophils in the intestinal lumen engage ICAM-1 to regulate the epithelial barrier and neutrophil recruitment. [Mucosal Immunol. 7 \(4\): 905-15.](#)
  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.](#)

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**Storage**

Store at -20°C 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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10162 available at:  
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA928EL\)](#)

<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://www.bio-rad-antibodies.com/datasheets)  
'M365545:200529'

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