

# Datasheet: MCA1615EL BATCH NUMBER 148184

Description:	MOUSE ANTI HUMAN CD54:Low Endotoxin
Specificity:	CD54
Other names:	ICAM-1
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	15.2
Isotype:	lgG1
Quantity:	0.5 mg

# **Product Details**

	This product has been re	ported to	work in th	ne following application	ns. This information is	
Applications	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 p	-				
	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					
	a galao onny. It io roconnin	system using appropriate negative/positive controls.				
	• •				for use in their own	
Target Species	• •				for use in their own	
Target Species Species Cross	system using appropriate				for use in their own	
	system using appropriate Human	negative	e/positive	controls.		
Species Cross	system using appropriate Human Reacts with: Pig	negative Ind worki	e/positive of the second se	controls.	species. Cross	
Species Cross	system using appropriate Human Reacts with: Pig <b>N.B.</b> Antibody reactivity a reactivity is derived from t	negative Ind worki testing w	e/positive of ng conditi ithin our la	controls. ons may vary between aboratories, peer-revie	species. Cross wed publications or	
Species Cross	system using appropriate Human Reacts with: Pig <b>N.B.</b> Antibody reactivity a	negative Ind worki testing w	e/positive of ng conditi ithin our la	controls. ons may vary between aboratories, peer-revie	species. Cross wed publications or	

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 0.01 EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human monocytes
External Database Links	UniProt: <u>P05362</u> <u>Related reagents</u>
	Entrez Gene: <u>3383</u> ICAM1 <u>Related reagents</u>
RRID	AB_2264493
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0-Ag14 myeloma cell line
Specificity	<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.
	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 ( <u>Berendt <i>et al.</i> 1992</u> ). 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 ( <u>Chakravorty and Craig 2005</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Dransfield, I. <i>et al.</i> (1992) Interaction of leukocyte integrins with ligand is necessary but not sufficient for function. <u>J Cell Biol. 116:1527-35.</u></li> <li>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. <u>Cell. 68: 71-81.</u></li> <li>Urquhart, P. <i>et al.</i> (2007) Carbon monoxide-releasing molecules modulate leukocyte- endothelial interactions under flow. <u>J Pharmacol Exp Ther. 321 (2): 656-62.</u></li> </ol>

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 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. <u>J Virol. 91 (8)</u>: pii: e02442-16.
 Lennartz, F. *et al.* (2015) Mapping the Binding Site of a Cross-Reactive *Plasmodium falciparum* PfEMP1 Monoclonal Antibody Inhibitory of ICAM-1 Binding. <u>J Immunol. 195</u> (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.
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/MCA1615EL 10162
Regulatory	For research purposes only

## **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12)	RPE		
Goat Anti Mouse IgG IgA IgM (STAR87)			
Goat Anti Mouse IgG (STAR76)	RPE		
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>		
Goat Anti Mouse IgG (H/L) (STAR117)	<u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®550</u> ,		
	<u>DyLight®650</u> , <u>DyLight®680</u> , <u>DyLight®800</u> ,		
	<u>FITC</u> , <u>HRP</u>		
Goat Anti Mouse IgG (STAR77)	HRP		
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP		
Rabbit Anti Mouse IgG (STAR13)	HRP		
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>		
Becommended Negative Controle			

### **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-r	ad.com	Email: antibody_sales_uk@bio	o-rad.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M365545:200529'

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