

# Datasheet: MCA773GA

**BATCH NUMBER 1807**

<b>Description:</b>	MOUSE ANTI RAT CD54
<b>Specificity:</b>	CD54
<b>Other names:</b>	ICAM-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1A29
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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	▪			1/25 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Immunofluorescence	▪			

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.

**(1)This clone is suitable for use on paraffin embedded material using target unmasking fluid [HIS003B](#) for this purpose.**

<b>Target Species</b>	Rat
<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>	Rat Ax cells (a HEV derived cell line).
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">Q00238</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">25464</a>    Icam1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Icam-1
<b>RRID</b>	AB_566847
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells from the PAI mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD54 antibody, clone 1A29</b> recognizes the rat CD54 cell surface antigen, also known as intercellular adhesion molecule-1 (ICAM-1), a ~90 kDa adhesion molecule belonging to the immunoglobulin superfamily.</p> <p>CD54 is a cell surface ligand of the lymphocyte integrin, LFA-1 and is known to play an important role in various cell-cell interactions in the immune system. Studies suggest that cross-linking of ICAM-1 using clone 1A29 induces calcium signalling (<a href="#">Etienne <i>et al.</i></a>).</p> <p>Functionally Mouse anti Rat CD54 antibody, clone 1A29 inhibits homotypic aggregation of PHA blasts.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kawai, T. <i>et al.</i> (1999) Selective diapedesis of Th1 cells induced by endothelial cell RANTES. <a href="#">J Immunol. 163: 3269-78.</a></li> <li>2. Sato, N. <i>et al.</i> (2000) Roles of ICAM-1 for abnormal leukocyte recruitment in the microcirculation of bleomycin-induced fibrotic lung injury. <a href="#">Am J Respir Crit Care Med. 161: 1681-8.</a></li> <li>3. Etienne, S. <i>et al.</i> (1998) ICAM-1 signaling pathways associated with Rho activation in microvascular brain endothelial cells. <a href="#">J Immunol. 161 (10): 5755-61.</a></li> <li>4. Etienne-Manneville, S. <i>et al.</i> (2000) ICAM-1-coupled cytoskeletal rearrangements and transendothelial lymphocyte migration involve intracellular calcium signaling in brain endothelial cell lines. <a href="#">J Immunol. 165 (6): 3375-83.</a></li> <li>5. McKechnie, N. M. <i>et al.</i> (2002) Antigenic mimicry: Onchocerca volvulus antigen-specific T cells and ocular inflammation. <a href="#">Invest Ophthalmol Vis Sci. 43:411-8.</a></li> </ol>

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**Storage**

Store at +4°C or at -20°C if preferred.

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 #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA773GA>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Human Anti Mouse IgG1 (HCA036...)	<a href="#">HRP</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

<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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