

## Datasheet: MCA1982

**BATCH NUMBER 171706**

<b>Description:</b>	MOUSE ANTI HUMAN CD239
<b>Specificity:</b>	CD239
<b>Other names:</b>	B-CAM
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BRIC221
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.2 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 (1)	▪			
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)Non-reducing conditions required**

### 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

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate Buffered Saline 12.3mM Tris 35mM Glycine
<b>Preservative Stabilisers</b>	<0.1% sodium azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human erythrocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P50895</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4059</a> BCAM    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	LU, MSK19
<b>RRID</b>	AB_2065308
<b>Specificity</b>	<p><b>Mouse anti Human CD239 antibody, clone BRIC221</b> recognizes human CD239, also known as Lutheran antigen or basal cell adhesion molecule. CD239 is a 597 amino acid, ~85 kDa single pass type I membrane glycoprotein. Clone BRIC221 recognizes a monomorphic determinant expressed on both the 85 and 78 kDa Lutheran (Lu) glycoforms (<a href="#">El Nemer et al. 1998</a>). BRIC 221 recognizes an epitope in the fourth extracellular domain of Lu glycoprotein (<a href="#">Parsons et al. 1997</a>). Lutheran glycoprotein is a member of the immunoglobulin superfamily and was designated CD239 (B-CAM) at the 7th leucocyte typing workshop. CD239 is expressed by erythrocytes in the peripheral blood.</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Sakai, E. <i>et al.</i> (2007) Construction of recombinant hemagglutinin derived from the gingipain-encoding gene of <i>Porphyromonas gingivalis</i>, identification of its target protein on erythrocytes, and inhibition of hemagglutination by an interdomain regional peptide. <a href="#">J Bacteriol. 189: 3977-86.</a></li> <li>2. Bruce, L.J. <i>et al.</i> (2003) A band 3-based macrocomplex of integral and peripheral proteins in the RBC membrane. <a href="#">Blood. 101: 4180-8.</a></li> <li>3. Kjellgren, D. <i>et al.</i> (2004) Laminin isoforms in human extraocular muscles. <a href="#">Invest Ophthalmol Vis Sci. 45: 4233-9.</a></li> <li>4. Vainionpää, N. <i>et al.</i> (2006) Laminin-10 and Lutheran blood group glycoproteins in adhesion of human endothelial cells. <a href="#">Am J Physiol Cell Physiol. 290: C764-75.</a></li> <li>5. Chen, J. <i>et al.</i> (2009) Expression of laminin isoforms, receptors, and binding proteins unique to nucleus pulposus cells of immature intervertebral disc. <a href="#">Connect Tissue Res. 50:</a></li> </ol>

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12. Vuoristo, S. *et al.* (2009) Laminin isoforms in human embryonic stem cells: synthesis, receptor usage and growth support. [J Cell Mol Med. 13: 2622-33.](#)
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14. Vainionpää N *et al.* (2007) Basement membrane protein distribution in LYVE-1-immunoreactive lymphatic vessels of normal tissues and ovarian carcinomas. [Cell Tissue Res. 328 \(2\): 317-28.](#)
15. Kikkawa Y *et al.* (2014) Soluble Lutheran/basal cell adhesion molecule is detectable in plasma of hepatocellular carcinoma patients and modulates cellular interaction with laminin-511 *in vitro*. [Exp Cell Res. 328 \(1\): 197-206.](#)
16. Kikkawa, Y. *et al.* (2008) Laminin  $\alpha 5$  mediates ectopic adhesion of hepatocellular carcinoma through integrins and/or Lutheran/basal cell adhesion molecule. [Exp Cell Res. 314 \(14\): 2579-90.](#)
17. Kikkawa, Y. *et al.* (2007) The LG1-3 tandem of laminin  $\alpha 5$  harbors the binding sites of Lutheran/basal cell adhesion molecule and  $\alpha 3\beta 1/\alpha 6\beta 1$  integrins. [J Biol Chem. 282 \(20\): 14853-60.](#)
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**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at  $-20^{\circ}\text{C}$  on receipt. When thawed, aliquot the sample as needed. Keep aliquots at  $2-8^{\circ}\text{C}$  for short term use (up to 4 weeks) and store the remaining aliquots at  $-20^{\circ}\text{C}$ .

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20520 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1982">https://www.bio-rad-antibodies.com/SDS/MCA1982</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<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>
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 IgG2b NEGATIVE CONTROL \(MCA691\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M445836:250922'

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