

## Datasheet: MCA2090

### BATCH NUMBER 1705

<b>Description:</b>	MOUSE ANTI HUMAN HLA A2
<b>Specificity:</b>	HLA A2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BB7.2
<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	▪			10ug/ml
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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>Product Form</b>	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
<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>	Papain solubilised HLA-A2
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P01892</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3105</a> HLA-A    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	HLAA
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human HLA A2 antibody, clone BB7.2</b> recognizes the human HLA-A2 histocompatibility antigen. The epitope recognized by this antibody has been studied extensively and would appear to include the carboxy-terminus of the alpha-2 helix and a turn on one of the underlying beta strands.</p> <p>Mouse anti Human HLA A2 antibody, clone BB7.2 may be used for the flow cytometric detection of HLA-A2 expression and has also been used for immunoaffinity purification of HLA-A2 molecules. Functionally Mouse anti Human HLA A2 antibody, clone BB7.2 is reported to inhibit MHC restricted cellular cytotoxicity.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood.
<b>Histology Positive Control Tissue</b>	Tonsil
<b>References</b>	<ol style="list-style-type: none"> <li>Parham, P. &amp; Brodsky, F.M. (1981) Partial purification and some properties of BB7.2. A cytotoxic monoclonal antibody with specificity for HLA-A2 and a variant of HLA-A28. <a href="#">Hum Immunol. 3 (4): 277-99.</a></li> <li>Hogan, K.T. &amp; Brown, S.L. (1992) Localization and characterization of serologic epitopes on HLA-A2. <a href="#">Hum Immunol. 33 (3): 185-92.</a></li> <li>Harig, S. <i>et al.</i> (2001) Induction of cytotoxic T-cell responses against immunoglobulin V region-derived peptides modified at human leukocyte antigen-A2 binding residues. <a href="#">Blood. 98 (10): 2999-3005.</a></li> <li>Pantenburg, B. <i>et al.</i> (2010) Human CD8(+) T cells clear <i>Cryptosporidium parvum</i> from infected intestinal epithelial cells. <a href="#">Am J Trop Med Hyg. 82:600-7.</a></li> <li>Duncan, L.M. <i>et al.</i> (2010) Stabilization of an E3 ligase-E2-ubiquitin complex increases cell surface MHC class I expression. <a href="#">J Immunol. 184: 6978-85.</a></li> <li>Wang, B. <i>et al.</i> (2004) Identification of an HLA-A*0201-restricted CD8+ T-cell epitope SSp-1 of SARS-CoV spike protein. <a href="#">Blood. 104: 200-6.</a></li> <li>Wooldridge, L. <i>et al.</i> (2007) Enhanced immunogenicity of CTL antigens through mutation of the CD8 binding MHC class I invariant region. <a href="#">Eur J Immunol. 37: 1323-33.</a></li> </ol>

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15. Dockree, T. *et al.* (2017) CD8<sup>+</sup> T-cell specificity is compromised at a defined MHCI/CD8 affinity threshold. [Immunol Cell Biol. 95 \(1\): 68-76.](#)
16. Sun, W. *et al.* (2018) A modified HLA-A\*0201-restricted CTL epitope from human oncoprotein (hPEBP4) induces more efficient antitumor responses. [Cell Mol Immunol. Jan 29 \[Epub ahead of print\].](#)
17. Obenaus, M. *et al.* (2015) Identification of human T-cell receptors with optimal affinity to cancer antigens using antigen-negative humanized mice. [Nat Biotechnol. 33 \(4\): 402-7.](#)
18. Walseng, E. *et al.* (2015) Soluble T-cell receptors produced in human cells for targeted delivery. [PLoS One. 10 \(4\): e0119559.](#)

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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**

18 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/MCA2090>  
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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](#)  
 Goat Anti Mouse IgG (STAR70...) [FITC](#)  
 Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
 Goat Anti Mouse IgG (STAR76...) [RPE](#)  
 Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
 Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
 Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
 Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### **Recommended Negative Controls**

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

<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)

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**Printed on 25 Mar 2023**