

Datasheet: MCA2090F

BATCH NUMBER 163030

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|----------------------|------------------------------|
| Description: | MOUSE ANTI HUMAN HLA A2:FITC |
| Specificity: | HLA A2 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | BB7.2 |
| Isotype: | IgG2b |
| Quantity: | 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.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | Neat - 1/10 |

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.

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|---------------------------------------|--|----------------------------|--------------------------|
| Target Species | Human | | |
| Product Form | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | FITC | 490 | 525 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant. | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% Sodium Azide | | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml | | |

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|--------------------------------|--|
| Immunogen | Papain solubilized HLA-A2 |
| External Database Links | <p>UniProt: P01892 Related reagents</p> <p>Entrez Gene: 3105 HLA-A Related reagents</p> |
| Synonyms | HLAA |
| RRID | AB_324186 |
| Fusion Partners | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line |
| Specificity | <p>Mouse anti Human HLA A2 antibody, clone BB7.2 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> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood. |
| References | <ol style="list-style-type: none"> 1. Parham, P. & 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. Hum Immunol. 3 (4): 277-99. 2. Hogan, K.T. & Brown, S.L. (1992) Localization and characterization of serologic epitopes on HLA-A2. Hum Immunol. 33 (3): 185-92. 3. 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. Blood. 98 (10): 2999-3005. 4. Pantenburg, B. <i>et al.</i> (2010) Human CD8(+) T cells clear <i>Cryptosporidium parvum</i> from infected intestinal epithelial cells. Am J Trop Med Hyg. 82:600-7. 5. Duncan, L.M. <i>et al.</i> (2010) Stabilization of an E3 ligase-E2-ubiquitin complex increases cell surface MHC class I expression. J Immunol. 184: 6978-85. 6. 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. Blood. 104: 200-6. 7. Wooldridge, L. <i>et al.</i> (2007) Enhanced immunogenicity of CTL antigens through mutation of the CD8 binding MHC class I invariant region. Eur J Immunol. 37: 1323-33. 8. Wooldridge, L. <i>et al.</i> (2010) MHC class I molecules with Superenhanced CD8 binding properties bypass the requirement for cognate TCR recognition and nonspecifically activate CTLs. J Immunol. 184: 3357-66. 9. Popovic, J. <i>et al.</i> (2011) The only proposed T-cell epitope derived from the TEL-AML1 |

- translocation is not naturally processed. [Blood. 118 \(4\): 946-54.](#)
10. Schmidt, J. *et al.* (2011) Reversible Major Histocompatibility Complex I-Peptide Multimers Containing Ni²⁺-Nitrilotriacetic Acid Peptides and Histidine Tags Improve Analysis and Sorting of CD8⁺ T Cells. [J Biol Chem. 286: 41723-35.](#)
11. Brooks, S.E. *et al.* (2015) Application of the pMHC Array to Characterise Tumour Antigen Specific T Cell Populations in Leukaemia Patients at Disease Diagnosis. [PLoS One. 10 \(10\): e0140483.](#)
12. Rothe, K. *et al.* (2016) Latent Cytomegalovirus Infection in Rheumatoid Arthritis and Increased Frequencies of Cytolytic LIR-1+CD8⁺ T Cells. [Arthritis Rheumatol. 68 \(2\): 337-46.](#)
13. De Angelis Rigotti, F. *et al.* (2017) MARCH9-mediated ubiquitination regulates MHC I export from the TGN. [Immunol Cell Biol. 95 \(9\): 753-64.](#)
14. Kim, J.Y. *et al.* (2017) Detection of Donor-Derived Microparticles in the Peripheral Blood of a Hand Transplant Recipient During Rejection. [Transplant Direct. 3 \(3\): e131.](#)
15. Dockree, T. *et al.* (2017) CD8⁺ 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. 15 \(8\): 768-81.](#)
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.](#)

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

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2090F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:FITC \(MCA691F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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

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