

Datasheet: MCA2090F

BATCH NUMBER 1804

| Description: | MOUSE ANTI HUMAN HLA A2:FITC | | |
|---------------|------------------------------|--|--|
| Specificity: | HLA A2 | | |
| Format: | FITC | | |
| Product Type: | Monoclonal Antibody | | |
| Clone: | BB7.2 | | |
| Isotype: | lgG2b | | |
| 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.

| Farget Species | Human | | |
|----------------|------------------------------------|-----------------------------|----------------------|
| Product Form | Purified IgG conju | gated to Fluorescein Isoth | niocyanate Isomer 1 |
| lax Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | FITC | 490 | 525 |
| eparation | Purified IgG prepa supernatant. | ared by affinity chromatogi | raphy on Protein A f |
| ıffer Solution | Phosphate buffere | ed saline | |
| servative | 0.09% Sodium Az | ide | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| | | | |

| Immunogen | Papain solubilized HLA-A2 |
|----------------------------|--|
| External Database Links | UniProt: P01892 Related reagents |
| | Entrez Gene: |
| | 3105 HLA-A Related reagents |
| 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 | Mouse anti Human HLA A2 antibody, clone BB7.2 recognizes the human HLA-A2 histocompatability 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. |
| | 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. |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood. |
| References | 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. <u>Hum Immunol. 3 (4): 277-99.</u> 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. <u>Blood.</u> 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. |

- infected intestinal epithelial cells. Am J Trop Med Hyg. 82:600-7.
- 5. Duncan, L.M. et al. (2010) Stabilization of an E3 ligase-E2-ubiquitin complex increases cell surface MHC class I expression. J Immunol. 184: 6978-85.
- 6. Wang, B. et al. (2004) Identification of an HLA-A*0201-restricted CD8+ T-cell epitope SSp-1 of SARS-CoV spike protein. <u>Blood. 104: 200-6.</u>
- 7. Wooldridge, L. et al. (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. et al. (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. et al. (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. <u>PLoS One. 10 (10): e0140483.</u>
- 12. Rothe, K. *et al.* (2016) Latent Cytomegalovirus Infection in Rheumatoid Arthritis and Increased Frequencies of Cytolytic LIR-1+CD8+ T Cells. <u>Arthritis Rheumatol. 68 (2):</u> 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. <u>Cell Mol Immunol. 15</u> (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. <u>Nat Biotechnol. 33 (4): 402-7.</u>
 18. Walseng, E. *et al.* (2015) Soluble T-cell receptors produced in human cells for targeted delivery. <u>PLoS One. 10 (4): e0119559.</u>

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. This product is photosensitive and should be protected from light.

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 #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)

 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

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

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