

Datasheet: MCA2041C

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|----------------------|----------------------------------|
| Description: | MOUSE ANTI BOVINE CD172a:RPE-Cy5 |
| Specificity: | CD172a |
| Other names: | SIRP ALPHA |
| Format: | RPE-CY5 |
| Product Type: | Monoclonal Antibody |
| Clone: | CC149 |
| Isotype: | IgG2b |
| Quantity: | 100 TESTS/1ml |

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 |
| 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.

| Target Species | Bovine | | | | | | | | |
|------------------------|--|-------------------|---------------------|-------------------|---------------------|-----|-----|--|--|
| Product Form | Purified IgG conjugated to R. Phycoerythrin (RPE) -Cy5 - lyophilized | | | | | | | | |
| Reconstitution | Reconstitute with 1.0ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. | | | | | | | | |
| Max Ex/Em | <table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE-Cy5 488nm laser</td> <td>496</td> <td>667</td> </tr> </tbody> </table> | Fluorophore | Excitation Max (nm) | Emission Max (nm) | RPE-Cy5 488nm laser | 496 | 667 | | |
| Fluorophore | Excitation Max (nm) | Emission Max (nm) | | | | | | | |
| RPE-Cy5 488nm laser | 496 | 667 | | | | | | | |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant | | | | | | | | |
| Buffer Solution | Phosphate buffered saline | | | | | | | | |

| | |
|--------------------------------|--|
| Preservative | 0.09% sodium azide (NaN ₃) |
| Stabilisers | 1% bovine serum albumin 5% sucrose |
| Immunogen | Bovine afferent veiled dendritic cells |
| External Database Links | <p>UniProt: O46631 Related reagents</p> <p>Entrez Gene: 327666 SIRPA Related reagents</p> |
| Synonyms | MYD1, PTPNS1, SHPS1, SIRP |
| Specificity | <p>Mouse anti Bovine CD172a antibody, clone CC149 recognizes bovine CD172a, also known as MyD-1 antigen and SIRPA.</p> <p>CD172a is a ~55 kDa single pass type 1 membrane protein belonging to the family of signal regulatory proteins (SIRP). CD172a has been identified as the receptor for CD47. Bovine CD172a is strongly expressed by splenic macrophages, monocytes and a subset of afferent lymph veiled cells (ALVC) and by dendritic cells in the skin.</p> |
| Flow Cytometry | Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl |
| References | <ol style="list-style-type: none"> Smith, R. <i>et al.</i> (2003) A novel MyD-1 (SIRP-1alpha) signaling pathway that inhibits LPS-induced TNFalpha production by monocytes. Blood.102: 2532-40. Brackenbury, L.S. <i>et al.</i> (2005) Identification of a cell population that produces alpha/beta interferon <i>in vitro</i> and <i>in vivo</i> in response to noncytopathic bovine viral diarrhea virus. J Virol. 79: 7738-44. Price, S.J. & Hope, J.C.. (2009) Enhanced secretion of interferon-gamma by bovine gammadelta T cells induced by coculture with <i>Mycobacterium bovis</i>-infected dendritic cells: evidence for reciprocal activating signals. Immunology. 126:201-8 Waters, W.R. (2009) Signal regulatory protein alpha (SIRPalpha) cells in the adaptive response to ESAT-6/CFP-10 protein of tuberculous mycobacteria. PLoS One. 4: e6414. Jensen, K. <i>et al.</i> (2014) Comparison of small interfering RNA (siRNA) delivery into bovine monocyte-derived macrophages by transfection and electroporation. Vet Immunol Immunopathol. 158 : 224-32. Hussen J <i>et al.</i> (2014) The chemokine CCL5 induces selective migration of bovine classical monocytes and drives their differentiation into LPS-hyporesponsive macrophages <i>in vitro</i>. Dev Comp Immunol. 47 (2): 169-77. Eger, M. <i>et al.</i> (2015) Impacts of parturition and body condition score on glucose uptake capacity of bovine monocyte subsets. Vet Immunol Immunopathol. 166 (1-2): 33-42. Vachier N <i>et al.</i> (2015) An <i>in vitro</i> model to assess the immunosuppressive effect of tick saliva on the mobilization of inflammatory monocyte-derived cells. Vet Res. 46 (1): 117. Tahoun, A. <i>et al.</i> (2015) Functional analysis of bovine TLR5 and association with IgA responses of cattle following systemic immunisation with H7 flagella. Vet Res. 46: 9. |

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Further Reading

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Storage

Store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend

microcentrifugation before use.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2041C>
20487

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:RPE-Cy5 \(MCA691C\)](#)

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