

# Datasheet: MCA2678SBV610

**BATCH NUMBER 100008142**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | MOUSE ANTI BOVINE CD14:StarBright Violet 610 |
| <b>Specificity:</b>  | CD14   |
| <b>Format:</b>       | StarBright Violet 610                        |
| <b>Product Type:</b> | Monoclonal Antibody                          |
| <b>Clone:</b>        | CC-G33                                       |
| <b>Isotype:</b>      | IgG1   |
| <b>Quantity:</b>     | 100 TESTS/0.5ml                              |

## 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 | ▪   |    |                | Neat               |

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

### Species Cross Reactivity

Reacts with: Sheep, Human, Water Buffalo

**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 conjugated to StarBright Violet 610 - liquid

### Max Ex/Em

| Fluorophore           | Excitation Max (nm) | Emission Max (nm) |
|-----------------------|---------------------|-------------------|
| StarBright Violet 610 | 403                 | 607               |

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

### Buffer Solution

Phosphate buffered saline

|                                 |  |
|---------------------------------|--|
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide (NaN <sub>3</sub> )<br>1% Bovine Serum Albumin<br>0.1% Pluronic F68<br>0.1% PEG 3350<br>0.05% Tween 20  |
| <b>Immunogen</b>                | Partially purified polypeptides isolated from bovine leucocyte cell surface membrane.  |
| <b>External Database Links</b>  | <b>UniProt:</b><br><a href="#">Q95122</a> <a href="#">Related reagents</a><br><br><b>Entrez Gene:</b><br><a href="#">281048</a> CD14 <a href="#">Related reagents</a>  |
| <b>Fusion Partners</b>          | Spleen cells from immunised Balb/c mice were fused with cells of the NS1 myeloma cell line.  |
| <b>Specificity</b>              | <p><b>Mouse anti Bovine CD14, clone CC-G33</b> recognizes bovine CD14.</p> <p>CD14 is a GPI-anchored membrane glycoprotein and monocyte/macrophage differentiation antigen, belonging to the lipopolysaccharide receptor family, also expressed weakly on microglia and Langerhans cells. CD14 acts as a receptor for the potent bacterial endotoxin, lipopolysaccharide (LPS), facilitated by LPS-binding protein (LBP). The binding of LPS to CD14 results in cell activation and the release of cytokines and the inflammatory response, and has been shown to upregulate the cell surface expression of adhesion molecules.</p> <p>Mouse anti Bovine CD14 clone CC-G33 cross-reacts with human CD14 expressed on transfected COS-7 cells (<a href="#">Berthon &amp; Hopkins 1996</a>), ovine CD14 (<a href="#">Sopp et al. 1996</a>) and Water buffalo (<i>Bubalus bubalis</i>) CD14, (<a href="#">Mirielli et al. 2013</a>).</p>  |
| <b>Flow Cytometry</b>           | Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.  |
| <b>References</b>               | <ol style="list-style-type: none"> <li>Berthon, P. &amp; Hopkins, J. (1996) Ruminant cluster CD14. <a href="#">Vet Immunol Immunopathol. 52 (4): 245-8.</a></li> <li>Haas, K.M. and Estes, D.M. (2001) The identification and characterization of a ligand for bovine CD5. <a href="#">J Immunol. 166: 3158-66.</a></li> <li>Altreuther, G. et al. (2001) Morphologic and functional changes in bovine monocytes infected in vitro with the bovine leukaemia virus. <a href="#">Scand J Immunol. 54: 459-69.</a></li> <li>Fikri Y et al. (2002) Costimulatory molecule requirement for bovine WC1+gammadelta T cells' proliferative response to bacterial superantigens. <a href="#">Scand J Immunol. 55 (4): 373-81.</a></li> <li>Glew, E.J. et al. (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. <a href="#">J Gen Virol. 84: 1771-80.</a></li> <li>Harris, J. et al. (2003) Expression of caveolin by bovine lymphocytes and antigen-presenting cells. <a href="#">Immunology. 105: 190-5.</a></li> </ol> |

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**Storage**

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted.

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|--------------------------------------|--|
| <b>Guarantee</b>                     | 12 months from date of despatch  |
| <b>Acknowledgements</b>              | This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts  |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #20471 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA2678SBV610">https://www.bio-rad-antibodies.com/SDS/MCA2678SBV610</a><br>20471 |
| <b>Regulatory</b>                    | For research purposes only   |

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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://www.bio-rad-antibodies.com/datasheets)  
'M421795:230726'

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