

## Datasheet: MCA5918PE

<b>Description:</b>	MOUSE ANTI BOVINE CD32:RPE
<b>Specificity:</b>	CD32
<b>Other names:</b>	FcRII
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CCG36
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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

**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 R. Phycoerythrin (RPE) - lyophilized

#### Reconstitution

Reconstitute with 1.0 ml 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

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

<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</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose
<b>Immunogen</b>	Bovine FcγRII-transfected COS7 cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q28110</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">282229</a>    FCGR2    <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the NS-1myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Bovine CD32 antibody, clone CCG36</b> recognizes the bovine homologue of human CD32, one of a group of Fc receptors belonging to the immunoglobulin superfamily and involved in phagocytosis of opsonized microbes. Bovine CD32 is a single pass type 1 membrane protein of approximately 32kDa, expressed on the cell surface of most cells including B-lymphocytes, monocytes, neutrophils and afferent veiled lymph dendritic cells <a href="#">Chattha, K. et al. 2010</a>. It has been shown that expression of bovine CD32 is higher on macrophages than on neutrophils.</p> <p>CD32 can function in an inhibitory capacity to antibody production and is the low affinity Fc receptor for IgG (FcRII), binding to the Fc region of immunoglobulin gamma <a href="#">Chattha et al. 2009</a>.</p> <p>Mouse anti Bovine CD32, clone CCG36 is one of a number of anti bovine CD32 reagents available from Bio-Rad, clone CCG36 is of interest in that it also recognizes ovine CD32 while clone <a href="#">CCG39</a> recognizes only bovine CD32.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>1. Chattha, K.S. <i>et al.</i> (2009) Age related variation in expression of CD21 and CD32 on bovine lymphocytes: a cross-sectional study. <a href="#">Vet Immunol Immunopathol. 130 (1-2): 70-8.</a></li> <li>2. Chattha, K.S. <i>et al.</i> (2010) Variation in expression of membrane IgM, CD21 (CR2) and CD32 (FcγRIIB) on bovine lymphocytes with age: a longitudinal study. <a href="#">Dev Comp Immunol. 34 (5): 510-7.</a></li> <li>3. Chattha, K.S. <i>et al.</i> (2010) Expression of complement receptor 2 (CD21), membrane IgM and the inhibitory receptor CD32 (FcγRIIb) in the lymphoid tissues of neonatal calves. <a href="#">Vet Immunol Immunopathol. 137 (1-2): 99-108.</a></li> <li>4. Chattha, K.S. <i>et al.</i> (2010) Immunohistochemical investigation of cells expressing</li> </ol>

CD21, membrane IgM, CD32 and a follicular dendritic cell marker in the lymphoid tissues of neonatal calves. [Vet Immunol Immunopathol. 137 \(3-4\): 284-90.](#)

5. Werling, D. *et al.* (1998) Analysis of the phenotype and phagocytic activity of monocytes/macrophages from cattle infected with the bovine leukaemia virus. [Vet Immunol Immunopathol. 62 \(3\): 185-95.](#)

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<b>Storage</b>	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA5918PE">https://www.bio-rad-antibodies.com/SDS/MCA5918PE</a> 20487
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[MOUSE ANTI BOVINE CD32:FITC \(MCA5919F\)](#)

[MOUSE ANTI BOVINE CD32 \(MCA5919GA\)](#)

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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)

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