

Datasheet: MCA2220PE

### **BATCH NUMBER 150923**

Description:	MOUSE ANTI SHEEP CD45:RPE
Specificity:	CD45
Other names:	LCA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	1.11.32
Isotype:	lgG1
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			Neat

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.

Target Species	Sheep			
Species Cross	Reacts with: Bovine, 0	Goat		
Reactivity	reactivity is derived from	om testing within our l	ions may vary betweer aboratories, peer-revie ors. Please refer to refe	ewed publications or
Product Form	Purified IgG conjugate	ed to R. Phycoerythrin	ı (RPE) - lyophilized	
Reconstitution	Reconstitute with 1 m	l distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	RPE 488nm laser	496	578	

# supernatant

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
	5% Sucrose
	370 Gudiose
Immunogen	Ovine efferent lymphatic duct lymphocytes.
RRID	AB_324751
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1
	myeloma cell line.
Specificity	Mouse anti Sheep CD45 antibody, clone 1.11.32 recognizes the ovine CD45 (Leucocyte common antigen), expressed on all ovine lymphocytes, macrophages and granulocytes. Mouse anti Sheep CD45 antibody, clone 1.11.32 immunoprecipitates CD45 molecules of 190 kDa, 210 kDa and 225 kDa from lymph node lysates.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Mackay, C.R. <i>et al.</i> (1987) A monoclonal antibody to the p220 component of sheep LCA identifies B cells and a unique lymphocyte subset. Cell Immunol. 110 (1): 46-55.</li> <li>Zannettino, A.C. <i>et al.</i> (2010) Comparative assessment of the osteoconductive properties of different biomaterials in vivo seeded with human or ovine mesenchymal stem/stromal cells. Tissue Eng Part A. 16 (12): 3579-87.</li> <li>Mackay, C.R. <i>et al.</i> (1989) Gamma/delta T cells express a unique surface molecule appearing late during thymic development. Eur J Immunol. 19 (8): 1477-83.</li> <li>Breugelmans, S. <i>et al.</i> (2011) Immunoassay of lymphocyte subsets in ovine palatine tonsils. Acta Histochem. 113 (4): 416-22.</li> <li>Breugelmans, S. <i>et al.</i> (2011) Differences between the ovine tonsils based on an immunohistochemical quantification of the lymphocyte subpopulations. Comp Immunol Microbiol Infect Dis. 34: 217-25.</li> <li>Herdrich, B.J. <i>et al.</i> (2010) Regenerative healing following foetal myocardial infarction. Eur J Cardiothorac Surg. 38: 691-8.</li> <li>Reichert, J.C. <i>et al.</i> (2010) Ovine bone- and marrow-derived progenitor cells and their potential for scaffold-based bone tissue engineering applications <i>in vitro</i> and <i>in vitro</i>. J Tissue Eng Regen Med. 4: 565-76.</li> <li>Galinsky, R. <i>et al.</i> (2011) Effect of intra-amniotic lipopolysaccharide on nephron number in preterm fetal sheep. Am J Physiol Renal Physiol. 301 (2): F280-5.</li> <li>Kallapur, S.G. <i>et al.</i> (2011) Pulmonary and systemic inflammatory responses to intra-amniotic IL-1α in fetal sheep. Am J Physiol Lung Cell Mol Physiol. 301 (3): L285-95.</li> </ol>
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- 12. Geherin, S.A. *et al.* (2012) The skin, a novel niche for recirculating B cells. <u>J Immunol.</u> 188: 6027-35.
- 13. Jahroomishirazi, R. *et al.* (2014) Isolation and Characterization of CD271<sup>+</sup> Stem Cells Derived from Sheep Dermal Skin. <u>Cells Tissues Organs</u>. 200 (2): 141-52.
- 14. Stephens, E.H. *et al.* (2016) Extracellular matrix remodeling in wound healing of critical size defects in the mitral valve leaflet. <u>Heart Vessels. 31 (7): 1186-95.</u>
- 15. Mokhtari, S. *et al.* (2016) Boosting Hematopoietic Engraftment after *in Utero* Transplantation through Vascular Niche Manipulation. <u>Stem Cell Reports. 6 (6): 957-69.</u>
- 16. Bischoff, J. *et al.* (2016) CD45 Expression in Mitral Valve Endothelial Cells After Myocardial Infarction. <u>Circ Res. 119 (11): 1215-25.</u>
- 17. Lydon, H. *et al.* (2018) Peripheral mononuclear blood cell apheresis in a preclinical ovine model. <u>BMC Vet Res. 14 (1): 47.</u>
- 18. Schwarz, E.R. *et al.* (2020) Experimental Infection of Mid-Gestation Pregnant Female and Intact Male Sheep with Zika Virus. <u>Viruses. 12 (3)Mar 07 [Epub ahead of print].</u>
- 19. Barboni, B. *et al.* (2013) Synthetic bone substitute engineered with amniotic epithelial cells enhances bone regeneration after maxillary sinus augmentation. <u>PLoS One. 8 (5):</u> e63256.
- 20. Ramm, R. *et al.* (2020) Decellularization combined with enzymatic removal of N-linked glycans and residual DNA reduces inflammatory response and improves performance of porcine xenogeneic pulmonary heart valves in an ovine *in vivo* model. Xenotransplantation. 27 (2): e12571.
- 21. López-Fernández, A. *et al.* (2020) Effect of Allogeneic Cell-Based Tissue-Engineered Treatments in a Sheep Osteonecrosis Model. <u>Tissue Eng Part A. 26 (17-18): 993-1004.</u>
- 22. Wooldridge, A.L. *et al.* (2019) Maternal allergic asthma during pregnancy alters fetal lung and immune development in sheep: potential mechanisms for programming asthma and allergy. <u>J Physiol. 597 (16): 4251-4262.</u>
- 23. Savy, V. *et al.* (2021) Effect of Embryo Aggregation on *In Vitro* Development of Adipose-Derived Mesenchymal Stem Cell-Derived Bovine Clones. <u>Cell Reprogram. 23 (5):</u> 277-89.

#### Storage

Prior to reconstitution store at +4°C. Following reconstitution 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
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2220PE">https://www.bio-rad-antibodies.com/SDS/MCA2220PE</a> 20487
Regulatory	For research purposes only

### Related Products

## **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

 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 'M375434:210104'

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