

# Datasheet: MCA2220PE BATCH NUMBER 164216

MOUSE ANTI SHEEP CD45:RPE		
CD45		
LCA		
RPE		
Monoclonal Antibody		
1.11.32		
lgG1		

# **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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		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 giver 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	Sheep						
Species Cross Reactivity	Reacts with: Bovine, Goat <b>N.B.</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 ml distilled water						
Max Ex/Em	Fluorophore	Excitation Max (nm	Emission Max (nm)				
	RPE 488nm laser	496	578				
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture						

	supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin 5% sucrose
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	<b>Mouse anti Sheep CD45 antibody, clone 1.11.32</b> 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 10µl of the suggested working dilution to label $10^6$ cells in $100µl$
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. <u>Cell Immunol. 110 (1): 46-55.</u></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. <u>Tissue Eng Part A. 16 (12): 3579-87.</u></li> <li>Mackay, C.R. <i>et al.</i> (1989) Gamma/delta T cells express a unique surface molecule appearing late during thymic development. <u>Eur J Immunol. 19 (8): 1477-83.</u></li> <li>Breugelmans, S. <i>et al.</i> (2011) Immunoassay of lymphocyte subsets in ovine palatine tonsils. <u>Acta Histochem. 113 (4): 416-22.</u></li> <li>Breugelmans, S. <i>et al.</i> (2011) Differences between the ovine tonsils based on an immunohistochemical quantification of the lymphocyte subpopulations. <u>Comp Immunol Microbiol Infect Dis. 34: 217-25.</u></li> <li>Herdrich, B.J. <i>et al.</i> (2010) Regenerative healing following foetal myocardial infarction. <u>Eur J Cardiothorac Surg. 38: 691-8.</u></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 vivo.</i> <u>J Tissue Eng Regen Med. 4: 565-76.</u></li> <li>Galinsky, R. <i>et al.</i> (2011) Effect of intra-amniotic lipopolysaccharide on nephron number in preterm fetal sheep. <u>Am J Physiol Renal Physiol. 301 (2): F280-5.</u></li> <li>Kallapur, S.G. <i>et al.</i> (2011) Pulmonary and systemic inflammatory responses to intra-amniotic L-1α in fetal sheep. <u>Am J Physiol Lung Cell Mol Physiol. 301 (3): L285-95.</u></li> <li>Stickler, P. <i>et al.</i> (2013) Role of amniotic fluid mesenchymal cells engineered on MgHA/collagen-based scaffold allotransplanted on an experimental animal study of sinus augmentation. <u>Clin Oral Investig. 17 (7): 1661-75.</u></li> </ol>

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	<u>188: 6027-35.</u>				
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	critical size defects in the mitral valve leaflet. <u>Heart Vessels. 31 (7): 1186-95.</u>				
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	Transplantation through Vascular Niche Manipulation. <u>Stem Cell Reports. 6 (6): 957-69.</u> 16. Bischoff, J. <i>et al.</i> (2016) CD45 Expression in Mitral Valve Endothelial Cells After				
	Myocardial Infarction. Circ Res. 119 (11): 1215-25.				
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	ovine model. BMC Vet Res. 14 (1): 47.				
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	and Intact Male Sheep with Zika Virus. <u>Viruses. 12 (3)Mar 07 [Epub ahead of print].</u>				
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	cells enhances bone regeneration after maxillary sinus augmentation. PLoS One. 8 (5):				
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	glycans and residual DNA reduces inflammatory response and improves performance of				
	porcine xenogeneic pulmonary heart valves in an ovine <i>in vivo</i> model.				
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	Treatments in a Sheep Osteonecrosis Model. Tissue Eng Part A. 26 (17-18): 993-1004.				
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	lung and immune development in sheep: potential mechanisms for programming asthma				
	and allergy. <u>J Physiol. 597 (16): 4251-4262.</u>				
	23. Savy, V. <i>et al.</i> (2021) Effect of Embryo Aggregation on <i>In Vitro</i> Development of Adipose-Derived Mesenchymal Stem Cell-Derived Bovine Clones. <u>Cell Reprogram. 23 (5):</u> <u>277-89.</u>				
	24. Castillo, M.G. <i>et al.</i> (2023) Promoting early neovascularization by allotransplanted adipose-derived Muse cells in an ovine model of acute myocardial infarction. <u>PLoS One.</u> <u>18 (1): e0277442.</u>				
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	Material Safety Datasheet documentation #20487 available at:				
Information	https://www.bio-rad-antibodies.com/SDS/MCA2220PE 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
	Email: antibody_sales_us@bi	io-rad.com	Email: antibody_sales_uk@bio	-rad.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M415471:230104'

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