

Datasheet: MCA2220F

Description:	MOUSE ANTI SHEEP CD45:FITC
Specificity:	CD45
Other names:	LCA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	1.11.32
Isotype:	IgG1
Quantity:	0.1 mg

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 - 1/5

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 Reactivity	Reacts with: Bovine, Goat N.B. Antibody reactivity and working conditions may vary between species.								
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid								
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>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
FITC	490	525							
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant								
Buffer Solution	Phosphate buffered saline								
Preservative	0.09% Sodium Azide								
Stabilisers	1% Bovine Serum Albumin								
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml								
Immunogen	Ovine efferent lymphatic duct lymphocytes.								
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 10⁶ cells in 100ul.

References

1. Mackay, C.R. *et al.* (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.](#)
2. Zannettino, A.C. *et al.* (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.](#)
3. Mackay, C.R. *et al.* (1989) Gamma/delta T cells express a unique surface molecule appearing late during thymic development. [Eur J Immunol. 19 \(8\): 1477-83.](#)
4. Breugelmans, S. *et al.* (2011) Immunoassay of lymphocyte subsets in ovine palatine tonsils. [Acta Histochem. 113 \(4\): 416-22.](#)
5. Breugelmans, S. *et al.* (2011) Differences between the ovine tonsils based on an immunohistochemical quantification of the lymphocyte subpopulations. [Comp Immunol Microbiol Infect Dis. 34: 217-25.](#)
6. Herdrich, B.J. *et al.* (2010) Regenerative healing following foetal myocardial infarction. [Eur J Cardiothorac Surg. 38: 691-8.](#)
7. Reichert, J.C. *et al.* (2010) Ovine bone- and marrow-derived progenitor cells and their potential for scaffold-based bone tissue engineering applications in vitro and in vivo. [J Tissue Eng Regen Med. 4: 565-76.](#)
8. Galinsky, R. *et al.* (2011) Effect of intra-amniotic lipopolysaccharide on nephron number in preterm fetal sheep. [Am J Physiol Renal Physiol. 301 \(2\): F280-5.](#)
9. Kallapur, S.G. *et al.* (2011) Pulmonary and systemic inflammatory responses to intra-amniotic IL-1 α in fetal sheep. [Am J Physiol Lung Cell Mol Physiol. 301 \(3\): L285-95.](#)
10. Stickler, P. *et al.* (2010) Cyclically stretching developing tissue in vivo enhances mechanical strength and organization of vascular grafts. [Acta Biomater. 6 \(7\): 2448-56.](#)
11. Berardinelli, P. *et al.* (2013) Role of amniotic fluid mesenchymal cells engineered on MgHA/collagen-based scaffold allotransplanted on an experimental animal study of sinus augmentation. [Clin Oral Investig. 17 \(7\): 1661-75.](#)
12. Geherin, S.A. *et al.* (2012) The skin, a novel niche for recirculating B cells. [J Immunol. 188: 6027-35.](#)
13. Jahroomishirazi, R. *et al.* (2014) Isolation and Characterization of CD271⁺ Stem Cells Derived from Sheep Dermal Skin. [Cells Tissues Organs. 200 \(2\): 141-52.](#)
14. Stephens EH *et al.* (2015) Extracellular matrix remodeling in wound healing of critical size defects in the mitral valve leaflet. [Heart Vessels. Nov 12. \[Epub ahead of print\]](#)
15. Mokhtari S *et al.* (2016) Boosting Hematopoietic Engraftment after *in Utero* Transplantation through Vascular Niche Manipulation. [Stem Cell Reports. 6 \(6\): 957-69.](#)
16. Bischoff, J. *et al.* (2016) CD45 Expression in Mitral Valve Endothelial Cells After Myocardial Infarction. [Circ Res. 119 \(11\): 1215-25.](#)
17. Lydon, H. *et al.* (2018) Peripheral mononuclear blood cell apheresis in a preclinical ovine model. [BMC Vet Res. 14 \(1\): 47.](#)

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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Printed on 20 Jun 2018

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