

Datasheet: MCA2219F

Description:	MOUSE ANTI SHEEP CD44:FITC
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	25.32
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 - 1/10

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, Human 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	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 CD44 antibody, clone 25.32** recognises the ovine CD44 cell surface antigen, a ~95 kDa glycoprotein expressed by most leucocytes and a subpopulation of thymocytes. In immunohistochemical staining, this antibody labels several cell types including medullary thymocytes, kupffer cells, kidney tubular epithelial cells and gut smooth muscle cells. The expression of CD44 is upregulated upon cell activation.

Mouse anti Sheep CD44 antibody, clone 25.32 is a valuable reagent for the isolation and characterization of ovine mesenchymal stem cells along with CD29 and [CD166](#) which are also expressed on this cell type, in contrast to hematopoietic cell markers including [CD45](#) which is negative on this mesenchymal stem cell population ([Sanjurjo-Rodríguez *et al.* 2017](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Mackay, C.R. *et al.* (1988) Characterization of a 95,000 molecule on sheep leucocytes homologous to murine Pgp-1 and human CD44. [Immunology. 65 \(1\): 93-9.](#)
2. Aleksandersen, M. *et al.* (1990) Distribution of lymphocyte subsets in the large intestinal lymphoid follicles of lambs. [Immunology. 70 \(3\): 391-7.](#)
3. Perry, K. *et al.* (2010) Hyaluronan (HA) content, the ratio of HA fragments and the expression of CD44 in the ovine cervix vary with the stage of the oestrous cycle. [Reproduction. 140:133-41.](#)
4. Stevenson, L.M. *et al.* (2001) Expression of cell surface adhesion molecules by peripheral blood eosinophils during *Trichostrongylus colubriformis* infection in sheep. [Immunol Cell Biol. 79 \(3\): 240-4.](#)
5. Witherden, D.A. *et al.* (1995) Antigen-independent maturation of CD2, CD11a/CD18, CD44, and CD58 expression on thymic emigrants in fetal and postnatal sheep. [Dev Immunol. 4:199-209](#)
6. Sanjurjo-Rodríguez, C. *et al.* (2017) Ovine Mesenchymal Stromal Cells: Morphologic, Phenotypic and Functional Characterization for Osteochondral Tissue Engineering. [PLoS One. 12 \(1\): e0171231.](#)

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.

Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

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Printed on 05 May 2018

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