

Datasheet: MCA920GA

Description:	MOUSE ANTI SHEEP CD14
Specificity:	CD14
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	VPM65
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	▪			1/50 - 1/250
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting			▪	

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	Sheep
Species Cross Reactivity	Reacts with: Bovine, Goat, Water Buffalo N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
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 ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Ovine macrophages
External Database Links	UniProt: Q06AV9 Related reagents
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS0 myeloma cell line
Specificity	<p>Mouse Anti Sheep CD14 antibody, clone VPM65 recognizes Ovine CD14, a GPI-anchored 55 kDa membrane glycoprotein and monocyte/macrophage differentiation antigen belonging to the lipopolysaccharide receptor family. Ovine CD14 is expressed by monocytes, macrophages and peripheral blood granulocytes.</p> <p>CD14 acts as a receptor for the potent bacterial endotoxin, lipopolysaccharide (LPS), facilitated by LPS-binding protein (LBP). The binding of LPS to CD14 results in cell activation, the release of cytokines and the inflammatory response, which has been shown to upregulate the cell surface expression of adhesion molecules.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or cells or 100ul whole blood
References	<ol style="list-style-type: none"> 1. Akesson, C.P. <i>et al.</i> (2008) Phenotypic characterisation of intestinal dendritic cells in sheep. Dev Comp Immunol. 32: 837-49. 2. Gupta, V.K. <i>et al.</i> (1996) Identification of the sheep homologue of the monocyte cell surface molecule--CD14. Vet Immunol Immunopathol. 51 (1-2): 89-99. 3. Summers, C. <i>et al.</i> (2012) The distribution of immune cells in the lungs of classical and atypical ovine pulmonary adenocarcinoma. Vet Immunol Immunopathol. 146: 1-7. 4. Langrova, T. <i>et al.</i> (2008) Expression of CD14 and CD44 on bovine polymorphonuclear leukocytes during resolution of mammary inflammatory response induced by muramyl dipeptide and lipopolysaccharide Veterinari Medicina, 53: 1-11 5. Andréoletti, O. <i>et al.</i> (2002) Phenotyping of protein-prion (PrP^{sc})-accumulating cells in lymphoid and neural tissues of naturally scrapie-affected sheep by double-labeling immunohistochemistry. J Histochem Cytochem. 50: 1357-70. 6. Berthon, P. and Hopkins, J. (1996) Ruminant cluster CD14. Vet Immunol Immunopathol. 52: 245-8. 7. Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. Immunology. 107 (3): 366-72. 8. Daniel, J.A. <i>et al.</i> (2003) Leptin, tumor necrosis factor-α (TNF), and CD14 in ovine adipose tissue and changes in circulating TNF in lean and fat sheep. J Anim Sci. 81: 2590-9. 9. Faldyna, M. <i>et al.</i> (1999) Leukocyte counts and lymphocyte subpopulations in the peripheral blood of pygmy goats from herd infected with Mycobacterium avium subspecies paratuberculosis Veterinari Medicina 44: 259-62 10. González, L. <i>et al.</i> (2001) Detection of immune system cells in paraffin wax-embedded ovine tissues. J Comp Pathol. 125: 41-7. 11. Merkwitz, C. <i>et al.</i> (2013) Dual origin, development, and fate of bovine pancreatic islets. J Anat. 222: 358-71. 12. Newland, A. <i>et al.</i> (2004) Ovine dendritic cells transduced with an adenoviral CTLA4eEGFP fusion protein construct induce hyporesponsiveness to allostimulation. Immunology. 113: 310-7. 13. Ryan, S. <i>et al.</i> (2000) Infection of dendritic cells by the Maedi-Visna lentivirus. J Virol. 74: 10096-103. 14. Sladek, Z. and Rysanek, D. (2010) Apoptosis of resident and inflammatory macrophages before and during the inflammatory response of the virgin bovine mammary gland. Acta Vet Scand. 52: 12.

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

Guarantee

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#), [DyLight®800](#), [FITC](#), [HRP](#)

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