

Datasheet: MCA2218GA

BATCH NUMBER 0514

Description:	MOUSE ANTI SHEEP CD25
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	9.14
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	▪			1/10 - 1/50
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
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
External Database Links	<p>UniProt: P26898 Related reagents</p> <p>Entrez Gene: 443435 IL2RA Related reagents</p>
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	<p>Mouse anti sheep CD25, clone 9.14 recognizes the ovine homologue of human CD25, also known as interleukin-2 receptor alpha chain (IL-2Rα), a single pass type I membrane protein expressed by activated ovine T-cells.</p> <p>Ovine Interleukin-2 is a cytokine involved in the proliferation, growth and differentiation of T-cells, B-cells and NK cells and its receptor is composed of 3 subunits, an α chain (CD25), a β chain (CD122) and a γ chain (CD132). A non-covalent association of the α and β subunits is required to form the high affinity receptor for IL-2.</p> <p>Mouse anti sheep CD25, clone 9.14 immunoprecipitates a band of ~47 kDa under reducing conditions, as expected for the mature protein due to high glycosylation, consistent with the observed molecular weight of IL-2Rα in other species including humans (Verhagen et al. 1993).</p> <p>Antibodies to CD4, FoxP3 and CD25 may be used in studies of T regulatory cells (T-regs), a unique subset of T helper cells that function in the control of effector cells vital in preventing autoimmunity (Rocchi et al. 2011).</p> <p>Mouse anti sheep CD25, clone 9.14 is one of a wide range of monoclonal antibodies available from Bio-Rad for ovine research and provides an important tool for the identification of ovine CD25 and may be of use in facilitating further studies of T-regs in this species.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1 x 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. 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. 2. Gillan, S. <i>et al.</i> (2010) Identification of immune parameters to differentiate disease states among sheep infected with <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i>. Clin Vaccine Immunol. 17: 108-17. 3. Gillan, S. <i>et al.</i> (2010) Ovine immune parameters following immunisation against <i>Mycobacterium avium</i> ssp. <i>paratuberculosis</i> using a lipid-based live-cell vaccine. Vet

[Immunol Immunopathol. 137 \(1-2\): 109-19.](#)

4. Piero, B. *et al.* (2016) Peripheral Blood and Milk Leukocytes Subsets of Lactating Sarda Ewes [It J Anim Sci. 12 \(2\): e34.](#)

5. Willems, M.G. *et al.* (2016) Systemic interleukin-2 administration improves lung function and modulates chorioamnionitis-induced pulmonary inflammation in the ovine fetus. [Am J Physiol Lung Cell Mol Physiol. 310 \(1\): L1-7.](#)

6. Lebedev, M. *et al.* (2021) Myeloid-like $\gamma\delta$ T cell subset in the immune response to an experimental Rift Valley fever vaccine in sheep [Veterinary Immunology and Immunopathology. : 110184.](#)

Further Reading 1. Rocchi, M.S. *et al.* (2011) Identification of CD4+CD25 high Foxp3+ T cells in ovine peripheral blood. [Vet Immunol Immunopathol. 144 \(1-2\): 172-7.](#)

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 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2218GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [FITC](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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