

Datasheet: MCA2218GA

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	UniProt:

Entrez Gene:

[443435](#) IL2RA [Related reagents](#)

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 CD25, clone 9.14**, is specific for the ovine homologue of human CD25, also known as interleukin-2 receptor alpha chain (IL-2R α), a single pass type I membrane protein expressed by activated ovine T-cells.

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.

Immunoprecipitation studies have demonstrated that clone 9.14 precipitates a band of approximately 47 kDa under reducing conditions, which is that expected of the mature protein due to high glycosylation, and is consistent with the observed molecular weight of IL-2R α in other species such as humans ([Verhagen et. al.1993](#)).

Research has demonstrated that 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](#)).

[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 used in facilitating further studies of T-regs in this species.](#)

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

References

1. Verhagen, A.M. *et al.* (1993) Characterization of the ovine interleukin-2 receptor-alpha chain: differential induction on precultured alpha beta and gamma delta T cells. [Immunology. 79 \(3\): 471-8.](#)
2. Gillan, S. *et al.* (2010) Identification of immune parameters to differentiate disease states among sheep infected with *Mycobacterium avium* subsp. *paratuberculosis*. [Clin Vaccine Immunol. 17: 108-17.](#)
3. Newland, A. *et al.* (2004) Ovine dendritic cells transduced with an adenoviral CTLA4eEGFP fusion protein construct induce hyporesponsiveness to allostimulation [Immunology 113: 310-7.](#)
4. Gillan, S. *et al.* (2010) Ovine immune parameters following immunisation against *Mycobacterium avium* ssp. *paratuberculosis* using a lipid-based live-cell vaccine. [Vet Immunol Immunopathol. 137 \(1-2\): 109-19.](#)

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.

Shelf Life	18 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

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

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

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

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

Recommended Negative Controls

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

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