

Datasheet: MCA1097GA

BATCH NUMBER 154200

Description:	MOUSE ANTI SHEEP CD31
Specificity:	CD31
Other names:	PECAM-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CO.3E1D4
Isotype:	IgG2a
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 - 1/25
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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	<p>Reacts with: Goat, Bovine</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
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 (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Ovine leucocytes.

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the SP2-0/Ag14 mouse myeloma cell line.

Specificity **Mouse anti Sheep CD31 antibody, clone CO.3E1D4** recognizes ovine CD31, also known as PECAM-1.

Ovine CD31 is predominantly expressed by peripheral blood platelets and a small percentage of lymphocytes. CD31 is also highly expressed by ovine endothelial cells.

Mouse anti Sheep CD31 antibody, clone CO.3E1D4 is reported to inhibit homotypic leucocyte aggregation induced by anti CD43 antibodies ([Pintado et al. 1995](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 1 x 10⁶ cells in 100ul.

- References**
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 3. 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.](#)
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 8. Summers, C. *et al.* (2005) An influx of macrophages is the predominant local immune

response in ovine pulmonary adenocarcinoma. [Vet Immunol Immunopathol. 106 \(3-4\): 285-94.](#)

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10. Boos, A.M. *et al.* (2011) Directly auto-transplanted mesenchymal stem cells induce bone formation in a ceramic bone substitute in an ectopic sheep model. [J Cell Mol Med. 15 \(6\): 1364-78.](#)

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13. Weigand, A. *et al.* (2017) Bone Tissue Engineering Under Xenogeneic-Free Conditions in a Large Animal Model as a Basis for Early Clinical Applicability. [Tissue Eng Part A. 23 \(5-6\): 208-22.](#)

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15. Barboni, B. *et al.* (2013) Synthetic bone substitute engineered with amniotic epithelial cells enhances bone regeneration after maxillary sinus augmentation. [PLoS One. 8 \(5\): e63256.](#)

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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/MCA1097GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#),
[DyLight@650](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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