

## Datasheet: MCA2225PE

<b>Description:</b>	MOUSE ANTI SHEEP MHC CLASS II DQ DR POLYMORPHIC:RPE
<b>Specificity:</b>	MHC CLASS II DQ DR POLYMORPHIC
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	28.1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

## Product Details

**RRID** AB\_324857

**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](http://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  
**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form** Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

**Reconstitution** Reconstitute with 1 ml distilled water

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

**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  
5% Sucrose

**Immunogen** Ovine alveolar macrophages.

<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Sheep MHC Class II DQ DR antibody, clone 28.1</b> recognizes a polymorphic epitope on ovine MHC class II DQ and DR molecules, which are constitutively expressed on antigen presenting cells such as dendritic cells, B lymphocytes, monocytes, macrophages, activated T lymphocytes and may be induced on a range of other cell types by interferon gamma.</p> <p>The major histocompatibility complex (MHC) is a cluster of genes some of which are important in the immune response to infections. In sheep, this complex is referred to as the ovine leukocyte antigen (OLA) region. There are 2 major types of MHC class IIa molecules encoded by the OLA which are DR and DQ each composed of an alpha and beta chain.</p> <p>Mouse anti Sheep MHC Class II DQ DR antibody, clone 28.1 recognizes ovine MHC II transfectants DQ - T28.1, DQ - T26.2 and DR - T31.3 but not DR - T8.1. (<a href="#">Ballingall, K. et al. 1995</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Puri, N.K. <i>et al.</i> (1985) Sheep lymphocyte antigens (OLA). II. Major histocompatibility complex class II molecules. <a href="#">Immunology. 56 (4): 725-33.</a></li> <li>2. Arzt, J. <i>et al.</i> (2017) Pathogenesis of virulent and attenuated foot-and-mouth disease virus in cattle. <a href="#">Virology. 14 (1): 89.</a></li> <li>3. Puri, N.K. <i>et al.</i> (1987) Monoclonal antibodies to sheep MHC class I and class II molecules: biochemical characterization of three class I gene products and four distinct subpopulations of class II molecules. <a href="#">Vet Immunol Immunopathol. 15 (1-2): 59-86.</a></li> <li>4. Puri, N.K. <i>et al.</i> (1987) Sheep MHC class II molecules. I. Immunochemical characterization. <a href="#">Immunology. 62 (4): 567-73.</a></li> <li>5. Puri, N.K. &amp; Brandon, M.R. (1987) Sheep MHC class II molecules. II. Identification and characterization of four distinct subsets of sheep MHC class II molecules. <a href="#">Immunology. 62 (4): 575-80.</a></li> <li>6. Puri, N.K. <i>et al.</i> (1987) Monoclonal antibodies to sheep MHC class II molecules recognize all HLA-D or subsets of HLA-D region products. <a href="#">Hum Immunol. 20 (3): 195-207.</a></li> <li>7. Ferret-Bernard, S. <i>et al.</i> (2011) Mesenteric lymph node cells from neonates present a prominent IL-12 response to CpG oligodeoxynucleotide via an IL-15 feedback loop of amplification. <a href="#">Vet Res. 42:19.</a></li> <li>8. Olivier, M. <i>et al.</i> (2012) Capacities of Migrating CD1b Lymph Dendritic Cells to Present Salmonella Antigens to Naive T Cells. <a href="#">PLoS One. 7: e30430.</a></li> <li>9. Ballingall, K. <i>et al.</i> (1995) Analysis of the fine specificities of sheep major histocompatibility complex class II - Specific monoclonal antibodies using mouse L - Cell transfectants. <a href="#">Anim. Genet. 26: 79-84.</a></li> </ol>
<b>Storage</b>	<p>Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.</p> <p>This product should be stored undiluted.</p> <p>DO NOT FREEZE. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of reconstitution.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10075 available at: 10075: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf</a>

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

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