

## Monoclonal Antibody to MHC Class II DQ/DR (polymorphic) - Purified

**Catalog No.:** SM2081P

**Quantity:** 0.25 mg

**Concentration:** 1.0 mg/ml

**Background:** The expression of ovine MHC class II molecules is restricted to B cells, activated T cells, monocytes, macrophages, dendritic cells and some endothelial and epithelial cells.

**Host / Isotype:** Mouse / IgG1

**Recommended Isotype Controls:** AM03095PU-N

**Clone:** 49.1

**Format:** **State:** Liquid purified IgG  
**Purification:** Affinity chromatography on Protein G  
**Buffer System:** PBS, pH 7.4 containing 0.09% Sodium Azide

**Applications:** Immunoprecipitation.  
Immunohistochemistry on frozen sections.  
This clone has been reported to react with paraffin-embedded material following alcohol fixation. Please refer to reference Sainte Marie et al for information about this protocol.  
Flow Cytometry: 1/50 - 1/200; Use 10µl of the suggested working dilution to label 1 x 10<sup>6</sup> cells in 100µl.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody recognises a polymorphic epitope on MHC class II DQ and DR molecules. In recent work, this clone was found to recognise ovine MHC transfectants DQ - T28.1, DR - T8.1 DR - T31.3, but not DQ - T26.2. (Ballingall. K. et al. 1995).

**Species:** Sheep, Bovine, Goat, Human.  
Other species not tested.

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:** 1. Puri NK, Gogolin-Ewens KJ, Brandon MR. 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. Vet Immunol Immunopathol. 1987 May;15(1-2):59-86. PubMed PMID: 3303652.  
2. Sainte-Marie, G. et al. (1962) A paraffin embedding technique for studies employing immunofluorescence. J. Histochem. Cytochem. 10: 250  
3. Puri NK, Brandon MR. Sheep MHC class II molecules. II. Identification and

characterization of four distinct subsets of sheep MHC class II molecules. Immunology. 1987 Dec;62(4):575-80. PubMed PMID: 3480873.

4. Puri NK, de Kretser T, Brandon MR. Monoclonal antibodies to sheep MHC class II molecules recognize all HLA-D or subsets of HLA-D region products. Hum Immunol. 1987 Nov;20(3):195-207. PubMed PMID: 3501780.

5. Ballingall KT, Dutia BM, Hopkins J, Wright H. Analysis of the fine specificities of sheep major histocompatibility complex class II-specific monoclonal antibodies using mouse L-cell transfectants. Anim Genet. 1995 Apr;26(2):79-84. PubMed PMID: 7733511.

**Pictures:**

Staining of sheep peripheral blood lymphocytes with MOUSE ANTI OVINE MHC CLASS II DQ/DR (POLYMORPHIC) (SM2081P).

