

## Datasheet: MCA477

**BATCH NUMBER 152303**

<b>Description:</b>	MOUSE ANTI HUMAN HLA DP DQ DR
<b>Specificity:</b>	HLA DP DQ DR
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	WR18
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.2 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays (2)	▪			

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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

**(2) This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	Human HLA Class II (DP, DQ, DR).
<b>RRID</b>	AB_322101
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells from NS0 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human HLA DP DQ DR antibody, clone WR18</b> reacts with a monomorphic determinant common to DP, DQ and DR beta chains, which are expressed by antigen presenting cells, B cells, monocytes and activated T lymphocytes.</p> <p>The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In humans, this complex is referred to as the human leukocyte antigen (HLA) region. There are 3 major MHC class II proteins encoded by the HLA which are HLA DP, HLA DQ and HLA DR.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Tonsil
<b>References</b>	<ol style="list-style-type: none"> <li>1. Moore, K. <i>et al.</i> (1987) Use of the monoclonal antibody WR17, identifying the CD37 gp40-45 Kd antigen complex, in the diagnosis of B-lymphoid malignancy. <a href="#">J Pathol 152:13-21.</a></li> <li>2. Kissner, T.L. <i>et al.</i> (2011) Activation of MyD88 Signaling upon Staphylococcal Enterotoxin Binding to MHC Class II Molecules. <a href="#">PLoS One. 6: e15985.</a></li> <li>3. Chia, J.S. <i>et al.</i> (2001) Human T-cell responses to the glucosyltransferases of <i>Streptococcus mutans</i>. <a href="#">Clin Diagn Lab Immunol. 8: 441-5.</a></li> <li>4. Chang, Y.C. <i>et al.</i> (2008) Epigenetic control of MHC class II expression in tumor-associated macrophages by decoy receptor 3. <a href="#">Blood. 111: 5054-63.</a></li> <li>5. Litzinger, M.T. <i>et al.</i> (2009) Chronic lymphocytic leukemia (CLL) cells genetically modified to express B7-1, ICAM-1, and LFA-3 confer APC capacity to T cells from CLL patients. <a href="#">Cancer Immunol Immunother. 58: 955-65.</a></li> <li>6. Sadallah, S. <i>et al.</i> (2011) Microparticles (ectosomes) shed by stored human platelets downregulate macrophages and modify the development of dendritic cells. <a href="#">J Immunol. 186: 6543-52.</a></li> <li>7. Sabbah, S. <i>et al.</i> (2012) T-cell immunity to Kaposi sarcoma-associated herpesvirus: recognition of primary effusion lymphoma by LANA-specific CD4+ T cells. <a href="#">Blood. 119 (9): 2083-92.</a></li> <li>8. John, J. <i>et al.</i> (2010) Differential effects of Paclitaxel on dendritic cell function. <a href="#">BMC Immunol. 11:14.</a></li> </ol>

9. Palmer, K.J. *et al.* (2000) Interferon-alpha (IFN-alpha) stimulates anti-melanoma cytotoxic T lymphocyte (CTL) generation in mixed lymphocyte tumour cultures (MLTC). [Clin Exp Immunol. 119: 412-8.](#)
10. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. [J Biomed Biotechnol. 2012: 172420.](#)
11. Elias, F. *et al.* (2003) Strong cytosine-guanosine-independent immunostimulation in humans and other primates by synthetic oligodeoxynucleotides with PyNTTTTGT motifs. [J Immunol. 171: 3697-704.](#)
12. Silk, K.M. *et al.* (2012) Cross-presentation of tumour antigens by human induced pluripotent stem cell-derived CD141(+)XCR1+ dendritic cells. [Gene Ther. 19 \(10\): 1035-40.](#)
13. Adamski, J. (2004) 17{beta}-Estradiol Inhibits Class II MHC Expression: Influence on Histone Modifications and CBP Recruitment to the Class II MHC Promoter [Molecular Endocrinology 18:1963](#)
14. Keating, S. *et al.* (2002) The lytic cycle of Epstein-Barr virus is associated with decreased expression of cell surface major histocompatibility complex class I and class II molecules. [J Virol. 76: 8179-88.](#)
15. Trefzer, U. *et al.* (2000) Hybrid cell vaccination for cancer immune therapy: first clinical trial with metastatic melanoma. [Int J Cancer. 85 \(5\): 618-26.](#)
16. Hayman, M.W. *et al.* (2006) Soluble human leukocyte antigen: a diagnostic indicator of rheumatoid arthritis? [J Immunol Methods. 315 \(1-2\): 19-26.](#)
17. Manna, D. *et al.* (2012) WR18 MONOCLONAL ANTIBODY: A SINGLE ANTIBODY TO DETECT HLA DR, DP AND DQ ANTIGENS. [Abstracts/Human immunology 73:49-167 abstract 36P](#)
18. Neumann, F. *et al.* (2004) Identification of an antigenic peptide derived from the cancer-testis antigen NY-ESO-1 binding to a broad range of HLA-DR subtypes. [Cancer Immunol Immunother. 53 \(7\): 589-99.](#)
19. Neumann F *et al.* (2004) Identification of an HLA-DR-restricted peptide epitope with a promiscuous binding pattern derived from the cancer testis antigen HOM-MEL-40/SSX2. [Int J Cancer. 112 \(4\): 661-8.](#)
20. Iking-Konert C *et al.* (2005) Transdifferentiation of polymorphonuclear neutrophils to dendritic-like cells at the site of inflammation in rheumatoid arthritis: evidence for activation by T cells. [Ann Rheum Dis. 64 \(10\): 1436-42.](#)
21. Hönger, G. *et al.* (2015) Inter-individual differences in HLA expression can impact the CDC crossmatch. [Tissue Antigens. 85 \(4\): 260-6.](#)
22. del Pilar Martin, M. *et al.* (2008) Decrease in the numbers of dendritic cells and CD4+ T cells in cerebral perivascular spaces due to natalizumab. [Arch Neurol. 65 \(12\): 1596-603.](#)
23. Noble, P. *et al.* (2013) High levels of cleaved caspase-3 in colorectal tumour stroma predict good survival. [Br J Cancer. 108 \(10\): 2097-105.](#)
24. Llewelyn, M. *et al.* (2004) HLA class II polymorphisms determine responses to bacterial superantigens. [J Immunol. 172 \(3\): 1719-26.](#)
25. Koschwanez, H. *et al.* (2015) Stress-related changes to immune cells in the skin prior to wounding may impair subsequent healing. [Brain Behav Immun. 50: 47-51.](#)
26. Ziegler, C.G.K. *et al.* (2019) Constitutive Activation of the B Cell Receptor Underlies Dysfunctional Signaling in Chronic Lymphocytic Leukemia. [Cell Rep. 28 \(4\): 923-937.e3.](#)

**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA477>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
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 (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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