

Datasheet: MCA477

Description:	MOUSE ANTI HUMAN HLA DP DQ DR
Specificity:	HLA DP DQ DR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	WR18
Isotype:	IgG2a
Quantity:	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.

	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. Bio-Rad recommend the use of [EQU003](#) for this purpose.**

Target Species	Human
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
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Human HLA Class II (DP, DQ, DR).

Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells from NS0 mouse myeloma cell line.
Specificity	Mouse anti Human HLA DP DQ DR antibody, clone WR18 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. 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
Histology Positive Control Tissue	Tonsil
References	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. J. Pathol. 152:13-21. 2. Kissner, T.L. <i>et al.</i> (2011) Activation of MyD88 Signaling upon Staphylococcal Enterotoxin Binding to MHC Class II Molecules. PLoS One. 6: e15985. 3. Chia, J.S. <i>et al.</i> (2001) Human T-cell responses to the glucosyltransferases of <i>Streptococcus mutans</i>. Clin Diagn Lab Immunol. 8: 441-5. 4. Chang, Y.C. <i>et al.</i> (2008) Epigenetic control of MHC class II expression in tumor-associated macrophages by decoy receptor 3. Blood. 111: 5054-63. 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. Cancer Immunol Immunother. 58: 955-65. 6. Sadallah, S. <i>et al.</i> (2011) Microparticles (ectosomes) shed by stored human platelets downregulate macrophages and modify the development of dendritic cells. J Immunol. 186: 6543-52. 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. Blood. 119 (9): 2083-92. 8. John, J. <i>et al.</i> (2010) Differential effects of Paclitaxel on dendritic cell function. BMC Immunol. 11:14. 9. Palmer, K.J. <i>et al.</i> (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. <i>et al.</i> (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012: 172420. 11. Elias, F. <i>et al.</i> (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. <i>et al.</i> (2012) Cross-presentation of tumour antigens by human induced pluripotent stem cell-derived CD141(+)XCR1+ dendritic cells. Gene Ther. 19 (10): 1035-40. 13. del Pilar Martin, M. <i>et al.</i> (2008) Decrease in the numbers of dendritic cells and CD4+ T cells in cerebral perivascular spaces due to natalizumab. Arch Neurol. 65: 1596-603. 14. Keating, S. <i>et al.</i> (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. <i>et al.</i> (2000) Hybrid cell vaccination for cancer immune therapy: first clinical trial with

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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.](#)
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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.](#)
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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.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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