

Datasheet: MCA477PE

Description:	MOUSE ANTI HUMAN HLA DP DQ DR:RPE
Specificity:	HLA DP DQ DR
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	WR18
Isotype:	IgG2a
Quantity:	100 TESTS

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	▪			Neat

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	Human		
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	Human HLA Class II (DP, DQ, DR).
RRID	AB_322103
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells from NS0 mouse myeloma cell line.
Specificity	<p>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.</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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	<ol style="list-style-type: none"> 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. Trefzer, U. <i>et al.</i> (2000) Hybrid cell vaccination for cancer immune therapy: first clinical trial with metastatic melanoma. Int J Cancer. 85 (5): 618-26. 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. 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. 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. 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. Llewelyn, M. <i>et al.</i> (2004) HLA class II polymorphisms determine responses to bacterial superantigens. J Immunol. 172 (3): 1719-26. Neumann F <i>et al.</i> (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. Neumann, F. <i>et al.</i> (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. Adamski, J. (2004) 17β-Estradiol Inhibits Class II MHC Expression: Influence on Histone Modifications and CBP Recruitment to the Class II MHC Promoter Molecular Endocrinology 18:1963 Iking-Konert C <i>et al.</i> (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.

12. Hayman, M.W. *et al.* (2006) Soluble human leukocyte antigen: a diagnostic indicator of rheumatoid arthritis? [J Immunol Methods. 315 \(1-2\): 19-26.](#)
13. Chang, Y.C. *et al.* (2008) Epigenetic control of MHC class II expression in tumor-associated macrophages by decoy receptor 3. [Blood. 111: 5054-63.](#)
14. 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.](#)
15. Litzinger, M.T. *et al.* (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.](#)
16. John, J. *et al.* (2010) Differential effects of Paclitaxel on dendritic cell function. [BMC Immunol. 11:14.](#)
17. Sadallah, S. *et al.* (2011) Microparticles (ectosomes) shed by stored human platelets downregulate macrophages and modify the development of dendritic cells. [J Immunol. 186: 6543-52.](#)
18. Kissner, T.L. *et al.* (2011) Activation of MyD88 Signaling upon Staphylococcal Enterotoxin Binding to MHC Class II Molecules. [PLoS One. 6: e15985.](#)
19. 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.](#)
20. 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.](#)
21. Sabbah, S. *et al.* (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.](#)
22. Manna, D. *et al.* (2012) 36-P: WR18 Monoclonal Antibody: A Single Antibody to Detect HLA DR, DP and DQ Antigens. [Human Immunol. 73: 72.](#)
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. 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.](#)
25. Hönger, G. *et al.* (2015) Inter-individual differences in HLA expression can impact the CDC crossmatch. [Tissue Antigens. 85 \(4\): 260-6.](#)
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

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA477PE>

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Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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