

# Datasheet: MCA477SBB580

Description:	MOUSE ANTI HUMAN HLA DP DQ DR:StarBright Blue 580		
Specificity:	HLA DP DQ DR		
Format:	StarBright Blue 580		
Product Type:	Monoclonal Antibody		
Clone:	WR18		
lsotype:	lgG2a		
Quantity:	100 TESTS/0.5ml		

## **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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		Yes	No	Not Determined	Suggested Dilution		
	Flow Cytometry	-			Neat		
	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.						
Target Species	Human						
Product Form	Purified IgG conjugated to StarBright Blue 580 - liquid						
Max Ex/Em	Fluorophore StarBright Blue 580	Excitation Ma	ax (nm)	Emission Max (nm) 582			
Preparation	Purified IgG prepared supernatant	by affinity chro	omatogra	aphy on Protein G fro	m tissue culture		
Buffer Solution	Phosphate buffered sa	aline					
Preservative Stabilisers	0.09% Sodium Azide ( 1% Bovine Serum Alb 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20	,					

Immunogen	Human HLA Class II (DP, DQ, DR).					
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells from NS0 mouse myeloma cell line.					
Specificity	<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.					
	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 5ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.					
References	<ol> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Llewelyn, M. <i>et al.</i> (2004) HLA class II polymorphisms determine responses to bacterial superantigens. J Immunol. 172 (3): 1719-26.</li> <li>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 NY-ESO-1 binding to a broad range of HLA-DR subtypes. Cancer Immunol Immunolter. 53 (7): 589-99.</li> <li>Adamski, J. (2004) 17{beta}-Estradiol Inhibits Class II MHC Promoter Molecular Endocrinology 18:1963</li> <li>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.</li> <li>Hayman, M.W. <i>et al.</i> (2006) Soluble human leukocyte antigen: a diagnostic indicator of polymorphonuclear neutrophi</li></ol>					

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 tumorassociated macrophages by decoy receptor 3. <u>Blood. 111: 5054-63.</u>

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. <u>Arch Neurol. 65 (12):</u> <u>1596-603.</u>

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. <u>Cancer Immunol Immunother. 58: 955-65.</u>

16. John, J. *et al.* (2010) Differential effects of Paclitaxel on dendritic cell function. <u>BMC</u> <u>Immunol. 11:14.</u>

17. Sadallah, S. *et al.* (2011) Microparticles (ectosomes) shed by stored human platelets downregulate macrophages and modify the development of dendritic cells. <u>J Immunol.</u> <u>186: 6543-52.</u>

18. Kissner, T.L. *et al.* (2011) Activation of MyD88 Signaling upon Staphylococcal Enterotoxin Binding to MHC Class II Molecules. <u>PLoS One. 6: e15985.</u>

19. Silk, K.M. *et al.* (2012) Cross-presentation of tumour antigens by human induced pluripotent stem cell-derived CD141(+)XCR1+ dendritic cells. <u>Gene Ther. 19 (10):</u> 1035-40.

 Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. <u>J Biomed Biotechnol. 2012: 172420.</u>
 Sabbah, S. *et al.* (2012) T-cell immunity to Kaposi sarcoma-associated herpesvirus: recognition of primary effusion lymphoma by LANA-specific CD4+ T cells. <u>Blood. 119 (9)</u>: 2083-92.

22. Manna, D. *et al.* (2012) 36-P: WR18 Monoclonal Antibody: A Single Antibody to Detect HLA DR, DP and DQ Antigens. <u>Human Immunol. 73: 72.</u>

23. Noble, P. *et al.* (2013) High levels of cleaved caspase-3 in colorectal tumour stroma predict good survival. <u>Br J Cancer. 108 (10): 2097-105.</u>

24. Koschwanez, H. *et al.* (2015) Stress-related changes to immune cells in the skin prior to wounding may impair subsequent healing. <u>Brain Behav Immun. 50: 47-51.</u>

25. Hönger, G. *et al.* (2015) Inter-individual differences in HLA expression can impact the CDC crossmatch. <u>Tissue Antigens. 85 (4): 260-6.</u>

26. Ziegler, C.G.K. *et al.* (2019) Constitutive Activation of the B Cell Receptor Underlies Dysfunctional Signaling in Chronic Lymphocytic Leukemia. <u>Cell Rep. 28 (4): 923-937.e3.</u>
27. Costa, S.F. *et al.* (2024) MicroRNA-194 regulates parasitic load and IL-1β-dependent nitric oxide production in the peripheral blood mononuclear cells of dogs with leishmaniasis. <u>PLoS Negl Trop Dis. 18 (1): e0011789.</u>

Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA477SBB580

#### Regulatory

For research purposes only

### **Related Products**

### **Recommended Useful Reagents**

### HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M407380:221007'

#### Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint