

Datasheet: MCA477SBR815

Description:	MOUSE ANTI HUMAN HLA DP DQ DR:StarBright Red 815		
Specificity:	HLA DP DQ DR		
Format:	StarBright Red 815		
Product Type:	Monoclonal Antibody		
Clone:	WR18		
Isotype:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 conjuga	ted to StarBright Red 8	315 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Red 815	654	811
Preparation	•	d by affinity chromatog	raphy on Protein G t
	supernatant		
Buffer Solution	Phosphate buffered	saline	
	·		
Buffer Solution  Preservative Stabilisers	Phosphate buffered	e (NaN <sub>3</sub> )	
Preservative	Phosphate buffered so	e (NaN <sub>3</sub> )	
Preservative	Phosphate buffered :  0.09% Sodium Azide 1% Bovine Serum Al	e (NaN <sub>3</sub> )	

ı	m	m	u	n	o	a	e	n
•	•••	•••	•	••	•	3	•	

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**

**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  $5\mu$ I of the suggested working dilution to label  $10^6$  cells in  $100\mu$ I. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

#### References

- 1. Moore, K. *et al.* (1987) Use of the monoclonal antibody WR17, identifying the CD37 gp40-45 Kd antigen complex, in the diagnosis of B-lymphoid malignancy. <u>J Pathol</u> 152:13-21.
- 2. 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.
- 3. 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.
- 4. Chia, J.S. *et al.* (2001) Human T-cell responses to the glucosyltransferases of *Streptococcus mutans*. Clin Diagn Lab Immunol. 8: 441-5.
- 5. 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.
- 6. Elias, F. *et al.* (2003) Strong cytosine-guanosine-independent immunostimulation in humans and other primates by synthetic oligodeoxynucleotides with PyNTTTTGT motifs. <u>J. Immunol.</u> 171: 3697-704.
- 7. Llewelyn, M. *et al.* (2004) HLA class II polymorphisms determine responses to bacterial superantigens. <u>J Immunol</u>. 172 (3): 1719-26.
- 8. 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.
- 9. Neumann, F. *et al.* (2004) Identification of an antigenic peptide derived from the cancertestis antigen NY-ESO-1 binding to a broad range of HLA-DR subtypes. <u>Cancer Immunol Immunother. 53 (7): 589-99.</u>
- 10. 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
- 11. 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. <u>Ann Rheum Dis. 64 (10): 1436-42.</u>
- 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 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> 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. <u>BMC</u> 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. <u>J Immunol.</u> 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. <u>Gene Ther. 19 (10):</u> 1035-40.
- 20. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. <u>J Biomed Biotechnol</u>. 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. <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. 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. <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. PLoS Negl Trop Dis. 18 (1): e0011789.

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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA477SBR815">https://www.bio-rad-antibodies.com/SDS/MCA477SBR815</a>

**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 'M429011:240308'

#### Printed on 12 Dec 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint