

Datasheet: MCA71PE

BATCH NUMBER 164288

Description:	RAT ANTI HUMAN HLA DR:RPE
Specificity:	HLA DR
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	YE2/36-HLK
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 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 R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0 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 Stabilisers	0.09% Sodium Azide		
	1%	Bovine Serum Albumin	
	5%	Sucrose	

Immunogen	EHR-B Ramos cells.
RRID	AB_323502
Fusion Partners	Spleen cells from immunised AO rats were fused with cells of the rat Y3 Ag1.2.3 myeloma cell line.
Specificity	<p>Rat anti Human HLA DR antibody, clone YE2/36-HLK recognizes a monomorphic determinant of human HLA DR which is an MHC class II cell surface receptor expressed primarily on antigen presenting cells such as B lymphocytes, monocytes, macrophages 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> <p>Rat anti Human HLA DR antibody, clone YE2/36-HLK has also been reported to be cross reactive with mouse H-2 haplotypes b, d and q expressed by mouse strains including C57BL/6, DBA, and NZB (Brickell et al. 1981).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Cruchley, A.T. <i>et al.</i> (1987) Dual expression of the cell-surface antigens HLA-DR and CD1 (T6) by Langerhans cells in human buccal mucosa and skin. Arch Oral Biol. 32: 849-53. Thornhill, M.H. <i>et al.</i> (1989) Enhanced adhesion of autologous lymphocytes to gamma-interferon-treated human endothelial cells <i>in vitro</i>. Br J Exp Pathol. 70: 59-64. Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. J Histochem Cytochem. 43 (3): 313-20. Becker, D. <i>et al.</i> (1997) Flow-cytometric screening for the modulation of receptor-mediated endocytosis in human dendritic cells: implications for the development of an in vitro technique for predictive testing of contact sensitizers. J Immunol Methods. 203: 171-80. Jonuleit, H. <i>et al.</i> (2000) Induction of interleukin 10-producing, nonproliferating CD4(+) T cells with regulatory properties by repetitive stimulation with allogeneic immature human dendritic cells. J Exp Med. 192: 1213-22. Walter, W. <i>et al.</i> (2001) H2-Mbeta 1 and H2-Mbeta 2 heterodimers equally promote clip removal in I-A(q) molecules from autoimmune-prone DBA/1 mice. J Biol Chem. 276: 11086-91. Shimada, A. <i>et al.</i> (2006) Translocation pathway of the intratracheally instilled ultrafine particles from the lung into the blood circulation in the mouse. Toxicol Pathol. 34: 949-57. Colić, M. <i>et al.</i> (2006) Correlation between phenotypic characteristics of mononuclear cells isolated from human periapical lesions and their in vitro production of Th1 and Th2 cytokines. Arch Oral Biol. 51: 1120-30. Zuo, J. <i>et al.</i> (2009) The Epstein-Barr virus G-protein-coupled receptor contributes to

immune evasion by targeting MHC class I molecules for degradation. [PLoS Pathog. 5\(1\): e1000255.](#)

10. Hietbrink, F. *et al.* (2011) Intramedullary nailing of the femur and the systemic activation of monocytes and neutrophils [World J Emerg Surg. 6: 34.](#)

11. Nguyen Hoang, A.T. *et al.* (2012) Dendritic cell functional properties in a three-dimensional tissue model of human lung mucosa. [Am J Physiol Lung Cell Mol Physiol. 302 \(2\): L226-37.](#)

12. Klotz, B. *et al.* (2012) 1,25-Dihydroxyvitamin D3 Treatment Delays Cellular Aging in Human Mesenchymal Stem Cells while Maintaining Their Multipotent Capacity. [PLoS One. 7: e29959.](#)

13. Thorne, A. *et al.* (2015) Tumor necrosis factor- α promotes survival and phenotypic maturation of poly(I:C)-treated dendritic cells but impairs their Th1 and Th17 polarizing capability. [Cytotherapy. 17 \(5\): 633-46.](#)

14. Hietbrink F *et al.* (2015) The Impact of Intramedullary Nailing of Tibia Fractures on the Innate Immune System. [Shock. 44 \(3\): 209-14.](#)

15. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. [PLoS One. 13 \(2\): e0192244.](#)

Storage

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

This product should be stored undiluted.

DO NOT FREEZE. 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/MCA71PE>
20487

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA6005PE\)](#)

Recommended Useful Reagents

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

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

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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