

Datasheet: MCA71F

Description:	RAT ANTI HUMAN HLA DR:FITC
Specificity:	HLA DR
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	YE2/36-HLK
Isotype:	IgG2a
Quantity:	0.1 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	▪			Neat - 1/10

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
Approx. Protein Concentrations	IgG concentration 0.1mg/ml		

Immunogen	EHR-B Ramos cells.
RRID	AB_323670
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):

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16. Tripathy, N.K. *et al.* (2018) Cardiomyogenic Heterogeneity of Clonal Subpopulations of Human Bone Marrow Mesenchymal Stem Cells. [J Stem Cells Regen Med. 14 \(1\): 27-33.](#)

Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA71F10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA6005F\)](#)

Recommended Useful Reagents

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

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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