

## Datasheet: MCA71F

<b>Description:</b>	RAT ANTI HUMAN HLA DR:FITC
<b>Specificity:</b>	HLA DR
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YE2/36-HLK
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1mg/ml		
<b>Immunogen</b>	EHR-B Ramos cells.		

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**Fusion Partners** Spleen cells from immunised AO rats were fused with cells of the rat Y3 Ag1.2.3 myeloma cell line.

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**Specificity** **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.

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.

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](#)).

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**Flow Cytometry** Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul.

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- References**
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  6. Zuo, J. *et al.* (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.](#)
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13. Colić, M. *et al.* (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.](#)
14. Becker, D. *et al.* (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.](#)
15. 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.](#)
16. Hietbrink F *et al.* (2015) The Impact of Intramedullary Nailing of Tibia Fractures on the Innate Immune System. [Shock. 44 \(3\): 209-14.](#)
17. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. [PLoS One. 13 \(2\): e0192244.](#)

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**Storage** 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.

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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**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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