

## Datasheet: MCA345F

**BATCH NUMBER 170445**

<b>Description:</b>	RAT ANTI HUMAN CD45:FITC
<b>Specificity:</b>	CD45
<b>Other names:</b>	LCA
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YTH24.5
<b>Isotype:</b>	IgG2b
<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

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 from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein</b>	IgG concentration 0.1 mg/ml		

## Concentrations

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**Immunogen** Human T lymphocytes.

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## External Database Links

**UniProt:**

[P08575](#)    [Related reagents](#)

**Entrez Gene:**

[5788](#)    PTPRC    [Related reagents](#)

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**Synonyms** CD45

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**RRID** AB\_2191698

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**Fusion Partners** Spleen cells from an immunized DA rat were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.

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**Specificity** **Rat anti Human CD45 antibody, clone YTH24.5** recognizes the human leukocyte common antigen CD45, expressed on all cells of haematopoietic origin except for erythrocytes.

The isolation and characterisation of this cell line was carried out with the help of funds supplied by the Medical Research Council, United Kingdom.

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul

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## References

1. Bindon, C.I. *et al.* (1985) Therapeutic potential of monoclonal antibodies to the leukocyte-common antigen. Synergy and interference in complement-mediated lysis. [Transplantation. 40 \(5\): 538-44.](#)
  2. Byeon, Y. *et al.* (2015) Isolation of nucleated red blood cells in maternal blood for Non-invasive prenatal diagnosis. [Biomed Microdevices. 17 \(6\): 118.](#)
  3. Thiele, G.M. *et al.* (2015) Malondialdehyde-acetaldehyde adducts and anti-malondialdehyde-acetaldehyde antibodies in rheumatoid arthritis. [Arthritis Rheumatol. 67 \(3\): 645-55.](#)
  4. Gossart, A. *et al.* (2019) Mitigation of monocyte driven thrombosis on cobalt chrome surfaces in contact with whole blood by thin film polar/hydrophobic/ionic polyurethane coatings. [Biomaterials. 217: 119306.](#)
  5. Moran, M. *et al.* (2022) Lipoteichoic acid and molecular weight of hyaluronic acid could explain the late inflammatory response trigger by hyaluronic acid fillers. [J Cosmet Dermatol. 21 \(11\): 5610-3.](#)
  6. Tiraihi, T. *et al.* (2023) A Sequential Culturing System for Generating Epithelial-Like Stem Cells from Human Mesenchymal Stem Cells Derived from Adipose Tissue [Cell and Tissue Biology. 17 \(6\): 639-52.](#)
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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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<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA345F">https://www.bio-rad-antibodies.com/SDS/MCA345F</a>
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:FITC \(MCA6006F\)](#)

### Recommended Useful Reagents

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

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M385582:210513'

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