

## Datasheet: MCA555

**BATCH NUMBER 1705**

<b>Description:</b>	MOUSE ANTI HUMAN CD43
<b>Specificity:</b>	CD43
<b>Other names:</b>	LEUKOSIALIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DFT-1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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	▪			1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			1/10 - 1/100
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide

**Stabilisers**

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1 mg/ml

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**Immunogen** KG-1 cells.

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**External Database Links**

**UniProt:**  
[P16150](#)    [Related reagents](#)

**Entrez Gene:**  
[6693](#)    SPN    [Related reagents](#)

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**Synonyms** CD43

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**RRID** AB\_321702

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**Specificity** **Mouse anti Human CD43 antibody, clone DFT-1** recognizes human CD43 also known as leukosialin or sialophorin. CD43 is a 381 amino acid single pass type I transmembrane glycoprotein present on the cell surface of multiple cell types including thymocytes, T-lymphocytes, neutrophils, plasma cells and platelets. It is lacking on the surface of most B-lymphocytes. CD34 is a major membrane sialoglycoprotein expressed on T lymphocytes as two predominant glycoforms, a ~115 kDa form present on all T-cells and a ~130 kDa form indicative of T-cell activation ([Barren \*et al.\* 1997](#)) and acts as a T-cell counter-receptor for [CD169/Siglec-1](#) ([van den Berg \*et al.\* 2001](#)). Mouse anti Human CD43 antibody, clone DFT-1 binds to both glycoforms of human CD43 ([Kyoizumi \*et al.\* 2004](#))

CD34 expression is deficient and/or defective in patients suffering from the X-linked chromosomal immunodeficiency condition [Wiskott-Aldrich syndrome](#) and acts as a ligand for [CD54](#) ([Rosenstein \*et al.\* 1991](#)).

Mouse anti human CD43, clone DFT-1 has been used successfully for the evaluation of CD43 expression in patients with Myelodysplastic syndromes ([Kyriakou \*et al.\* 2006](#)).

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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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**Immunohistology** This product does not require protein digestion pre-treatment of paraffin sections however, staining of paraffin embedded formalin fixed tissues may be improved in some cases by enzyme pretreatment using Trypsin.

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**Histology Positive Control Tissue** Tonsil

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**References**

1. Stross, W.P. *et al.* (1989) Molecule detected in formalin fixed tissue by antibodies MT1, DF-T1, and L60 (Leu-22) corresponds to CD43 antigen. [J Clin Pathol. 42 \(9\): 953-61.](#)
2. Kojima N *et al.* (1994) Role of cell surface O-linked oligosaccharides in adhesion of

- HL60 cells to fibronectin: regulation of integrin-dependent cell adhesion by O-linked oligosaccharide elongation. [Exp Cell Res. 214 \(2\): 537-42.](#)
3. Anzai, N. *et al.* (1999) Modulation of integrin function in hematopoietic progenitor cells by CD43 engagement: possible involvement of protein tyrosine kinase and phospholipase C-gamma. [Blood. 93 \(10\): 3317-26.](#)
4. Matsuo, A. *et al.* (1996) Expression of CD43 in human microglia and its downregulation in Alzheimer's disease. [J Neuroimmunol. 71 \(1-2\): 81-6.](#)
5. Nonomura, C. *et al.* (2008) CD43, but not P-selectin glycoprotein ligand-1, functions as an E-selectin counter-receptor in human pre-B-cell leukemia NALL-1. [Cancer Res. 68 \(3\): 790-9.](#)
6. Woroniecka, R. *et al.* (2015) Cytogenetic and flow cytometry evaluation of Richter syndrome reveals MYC, CDKN2A, IGH alterations with loss of CD52, CD62L and increase of CD71 antigen expression as the most frequent recurrent abnormalities. [Am J Clin Pathol. 143 \(1\): 25-35.](#)

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**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA555>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M368237:200529'

**Printed on 18 Jan 2024**

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