

Datasheet: MCA555

Description:	MOUSE ANTI HUMAN CD43
Specificity:	CD43
Other names:	LEUKOSIALIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	DFT-1
Isotype:	lgG1
Quantity:	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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	KG-1 cells.

External Database Links	UniProt:  P16150 Related reagents  Entrez Gene:  6693 SPN Related reagents		
Synonyms	CD43		
RRID	AB_321702		
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 ( <u>Kyriakou et al. 2006</u> ).		
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.		
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.		
Histology Positive Control Tissue	Tonsil		
References	<ol> <li>Stross, W.P. <i>et al.</i> (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.</li> <li>Kojima N <i>et al.</i> (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.</li> <li>Anzai, N. <i>et al.</i> (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.</li> <li>Matsuo, A. <i>et al.</i> (1996) Expression of CD43 in human microglia and its downregulation in Alzheimer's disease. J Neuroimmunol. 71 (1-2): 81-6.</li> <li>Nonomura, C. <i>et al.</i> (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.</li> <li>Woroniecka, R. <i>et al.</i> (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.</li> </ol>		

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

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.

Guarantee 12 months from date of despatch **Health And Safety** Material Safety Datasheet documentation #10040 available at: Information 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf

Regulatory For research purposes only

### Related Products

# **Recommended Secondary Antibodies**

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR77...) **HRP** Rabbit Anti Mouse IgG (STAR12...) **RPE** 

Rabbit Anti Mouse IgG (STAR8...) DyLight®800

Rabbit Anti Mouse IgG (STAR13...) **HRP** Goat Anti Mouse IgG (STAR76...) **RPE** Goat Anti Mouse IgG (STAR70...) **FITC** Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) **FITC** 

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®680,

Worldwide

DyLight®800, FITC, HRP

# **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South Tel: +1 800 265 7376 America

Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

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Fax: +44 (0)1865 852 739

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