

Datasheet: MCA555F

Description:	MOUSE ANTI HUMAN CD43:FITC
Specificity:	CD43
Other names:	LEUKOSIALIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	DFT-1
Isotype:	IgG1
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

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 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 A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen KG-1 cells.

External Database Links

UniProt:

[P16150](#) [Related reagents](#)

Entrez Gene:

[6693](#) SPN [Related reagents](#)

Synonyms CD43

RRID AB_321703

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](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 100ul of whole blood or 10⁶ cells in 100ul.

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. 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.](#)
4. 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.](#)
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.](#)

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.

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/MCA555F10041>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

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