

Datasheet: MCA555

BATCH NUMBER 1705

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

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	0.09% Sodium Azide

Stabilisers

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 ([Kyriakou *et al.* 2006](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ 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

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.](#)

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.

Guarantee 12 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

America Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M368237:200529'

Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)