

Datasheet: MCA1850F

BATCH NUMBER 180405

Description:	MOUSE ANTI HUMAN CD99:FITC
Specificity:	CD99
Other names:	MIC2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	DN16
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 ion exchange chromatography		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

External Database Links	UniProt: P14209 Related reagents Entrez Gene: 4267 CD99 Related reagents
Synonyms	MIC2, MIC2X, MIC2Y
RRID	AB_323202
Specificity	<p>Mouse anti human CD99 antibody, clone DN16 recognizes human CD99, also known as E2 antigen, MIC2 or 12E7. CD99 is a 185 amino acid ~32 kDa single pass type I transmembrane O-glycosylated glycoprotein. Three isoforms can be produced by alternative splicing. Epitope analysis of the DN16 clone suggests the antibody recognizes a minimal peptide sequence "LPDNENKK" located between residues 32 and 39 towards the N-terminal region of the molecule. This sequence is present in both isoforms I and II but is largely absent from isoform 3 suggesting that the antibody will only recognize isoforms I and II (Gil et al. 2002).</p> <p>CD99 expression is notable in the testis, pancreas, bone marrow, lymph nodes and spleen. CD99 is expressed on all classes of leukocytes and tends to be highest on immature cells.</p> <p>Functionally CD99 has been found to be involved in cellular adhesion/aggregation (Krisanaprakornkit et al. 2013) and apoptosis (Sciandra et al. 2014).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Choi, E.Y. <i>et al.</i> (1998) Engagement of CD99 induces up-regulation of TCR and MHC class I and II molecules on the surface of human thymocytes. J Immunol. 161 (2): 749-54. Hahn, J.H. <i>et al.</i> (1997) CD99 (MIC2) regulates the LFA-1/ICAM-1-mediated adhesion of lymphocytes, and its gene encodes both positive and negative regulators of cellular adhesion. J Immunol. 159 (5): 2250-8. Kim, S.H. <i>et al.</i> (1998) Generation of cells with Hodgkin's and Reed-Sternberg phenotype through downregulation of CD99 (Mic2). Blood. 92 (11): 4287-95. Gil, M.C. <i>et al.</i> (2002) Characterization and epitope mapping of two monoclonal antibodies against human CD99. Exp Mol Med. 34: 411-8. Kim, S.H. <i>et al.</i> (2008) Viral latent membrane protein 1 (LMP-1)-induced CD99 down-regulation in B cells leads to the generation of cells with Hodgkin's and Reed-Sternberg phenotype. Blood. 95: 294-300. Husak, Z. <i>et al.</i> (2010) Death induction by CD99 ligation in TEL/AML1-positive acute lymphoblastic leukemia and normal B cell precursors. J Leukoc Biol. 88: 405-12. Husak, Z. and Dworzak, M.N. (2012) CD99 ligation upregulates HSP70 on acute lymphoblastic leukemia cells and concomitantly increases NK cytotoxicity. Cell Death Dis. 3: e425.
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. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1850F 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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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
'M342211:190110'

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