

Datasheet: MCA1850FT

BATCH NUMBER 170926

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| Description: | MOUSE ANTI HUMAN CD99:FITC |
| Specificity: | CD99 |
| Other names: | MIC2 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | DN16 |
| Isotype: | IgG1 |
| Quantity: | 25 µg |

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.

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|---------------------------------------|--|----------------------------|--------------------------|
| 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 | | |

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|--------------------------------|---|
| External Database Links | UniProt: P14209 Related reagents Entrez Gene: 4267 CD99 Related reagents |
| Synonyms | MIC2, MIC2X, MIC2Y |
| RRID | AB_2076307 |
| 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. 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. Hughes, S.F. <i>et al.</i> (2020) The role of phagocytic leukocytes following flexible ureteroscopy, for the treatment of kidney stones: an observational, clinical pilots-study. Eur J Med Res. 25 (1): 68. |

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 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1850FT10041>

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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