## CD99R monoclonal antibody, clone MEM-131 (FITC)

Catalog # MAB5019 Size 100 Reactions

### Specification

Product Description	Mouse monoclonal antibody raised against native CD99.
Immunogen	Native purified CD99 from HPB-ALL human peripheral blood leukemia T-cell line.
Host	Mouse
Reactivity	Human
Specificity	This antibody reacts with CD99R, an epitope restricted to a subset of CD99 molecule expressed on myeloid cells, NK cells and T lymphocytes.
Form	Liquid
Conjugation	FITC
lsotype	lgM
Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10 <sup>6</sup> cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

### Applications

Flow Cytometry

# 😵 Abnova

Gene Info — CD99	
Entrez GenelD	<u>4267</u>
Gene Name	CD99
Gene Alias	MIC2, MIC2X, MIC2Y
Gene Description	CD99 molecule
Omim ID	<u>313470 450000</u>
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a cell surface glycoprotein involved in leukocyte migration, T- cell adhesion, ganglioside GM1 and transmembrane protein transport, and T-cell death by a casp ase-independent pathway. In addition, the encoded protein may have the ability to rearrange the a ctin cytoskeleton and may also act as an oncosuppressor in osteosarcoma. Cyclophilin A binds to CD99 and may act as a signaling regulator of CD99. This gene is found in the pseudoautosomal r egion of chromosomes X and Y and escapes X-chromosome inactivation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	CD99 antigen E2 antigen MIC2 (monoclonal antibody 12E7) OTTHUMP00000022840 T-cell surfa ce glycoprotein E2 antigen identified by monoclonal 12E7, Y homolog antigen identified by monoc lonal antibodies 12E7, F21 and O13 surface antigen MIC2

### **Publication Reference**

 Molecular mechanisms involved in CD43-mediated apoptosis of TF-1 cells. Roles of transcription Daxx expression, and adhesion molecules.

Cermak L, Simova S, Pintzas A, Horejsi V, Andera L.

The Journal of Biological Chemistry 2001 Dec; 277(10):7955.

Application: Flow Cyt, Human, TF-1 cells

• <u>CD99 (E2) up-regulates alpha4beta1-dependent T cell adhesion to inflamed vascular endothelium under flow</u> conditions.

Bernard G, Raimondi V, Alberti I, Pourtein M, Widjenes J, Ticchioni M, Bernard A. Journal of Immunology 2000 Oct; 30(10):3061.

Application: Func, Human, T cells

Apoptosis of immature thymocytes mediated by E2/CD99.

Bernard G, Breittmayer JP, de Matteis M, Trampont P, Hofman P, Senik A, Bernard A.

Journal of Immunology 1997 Mar; 158(6):2543.

Application: Flow Cyt, Human, Jurkat cells, Thymocytes

### Pathway

- Cell adhesion molecules (CAMs)
- Leukocyte transendothelial migration

#### Disease

- Arthritis
- Genetic Predisposition to Disease