

CD99 / MIC2 Monoclonal Mouse Antibody (12E7 + MIC2/877)

Product Description

This antibody recognizes a sialoglycoprotein of 27-32 kDa, identified as CD99, or MIC2 gene product, or E2 antigen. MIC2 gene is located in the pseudo-autosomal region of the human X and Y chromosome. MIC2 gene encodes two distinct proteins, which are produced by alternative splicing of the CD99 gene transcript and are identified as bands of 30 and 32 kDa (p30/32). Although its function is not fully understood, CD99 is implicated in various cellular processes including homotypic aggregation of T cells, upregulation of T cell receptor and MHS molecules, apoptosis of immature thymocytes and leukocyte diapedesis. CD99 is expressed on the cell membrane of some lymphocytes, cortical thymocytes, and granulosa cells of the ovary. Most pancreatic islet cells, Sertoli cells of the testis, and some endothelial cells express this antigen. Mature granulocytes express very little or no CD99. MIC2 is strongly expressed on Ewing's sarcoma cells and primitive peripheral neuroectodermal tumors.

Product attributes

Antibody number	#0878
Antibody reactivity (target)	CD99, MIC2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	12E7 + MIC2/877
Isotype	IgG1, kappa
Molecular weight	27-32 kDa
Synonyms	12E7; E2 antigen; MIC 2X; MIC 2Y; MIC2; Protein MIC2; Surface antigen MIC2; T-cell surface glycoprotein E2
Human gene symbol	CD99
Entrez gene ID	4267
SwissProt	P14209
Unigene	653349
Immunogen	Human acute lymphocytic leukemia T-cells (12E7); Recombinant human MIC2 protein (MIC2/877)
Antibody target cellular localization	Plasma membrane
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Flow cytometry: 5-10 uL/million cells. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistochemistry (formalin-fixed): 1:100-1:200 for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes. Immunofluorescence 1:100-1:200. Optimal dilution for a specific application should be determined by user
Positive control	MOLT-4 cells. Pancreas or Ewing's sarcoma.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA. Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide. Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Cell/tissue expression	Lymphocytes, Ovary, Pancreatic islet cells, T-cells, Testis
Tumor expression	Sarcoma
Antibody research areas	Cancer, Endocrinology, Immunology