

# Anti-CD99 / MIC2 Antibody

Recombinant Rabbit Monoclonal Antibody Catalog # AH13397

## **Product Information**

Application	IHC-P, IF, FC
Primary Accession	<u>P14209</u>
Other Accession	<u>653349</u>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit / IgG, kappa
Clone Names	MIC2/1495R
Calculated MW	18848

## **Additional Information**

Gene ID	4267
Other Names	12E7; E2 antigen; MIC 2X; MIC 2Y; MIC2; Protein MIC2; Surface antigen MIC2; T-cell surface glycoprotein E2
Application Note	Flow Cytometry (2-4ug/million cells); Immunofluorescence (2-4ug/ml); ,Immunohistology (Formalin-fixed) (5-10ug/ml for 30 min at Room Temp),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified by Protein A Column. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-CD99 / MIC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	CD99
Synonyms	MIC2, MIC2X, MIC2Y
Function	Involved in T-cell adhesion processes and in spontaneous rosette formation with erythrocytes. Plays a role in a late step of leukocyte extravasation helping leukocytes to overcome the endothelial basement membrane. Acts at the same site as, but independently of, PECAM1. Involved in T-cell adhesion

#### **Cellular Location**

Membrane; Single-pass type I membrane protein

# Background

Recognizes a sialoglycoprotein of 27-32kDa, 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 32kDa (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.

#### Images



Formalin-fixed, paraffin-embedded human Ewing's Sarcoma stained with CD99 Recombinant Rabbit Monoclonal Antibody (MIC2/1495R).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.