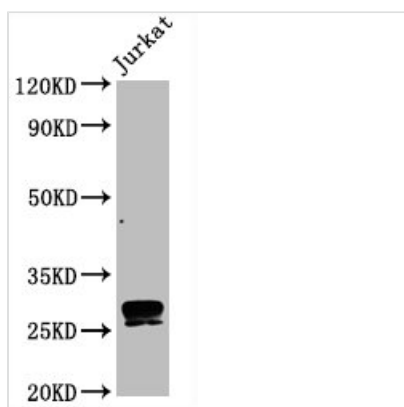




CD99 Recombinant Monoclonal Antibody

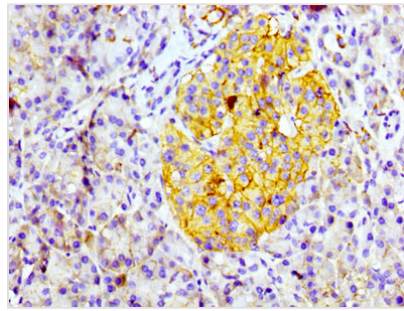
Product Code	CSB-RA004973A0HU
Abbreviation	CD99 antigen
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P14209
Immunogen	A synthesized peptide
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, FC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:500
Relevance	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 processes (By similarity).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	CD99 antigen, 12E7, E2 antigen, Protein MIC2, T-cell surface glycoprotein E2, CD99, CD99, MIC2, MIC2X, MIC2Y
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology
Gene Names	CD99
Clone No.	9A5

Image

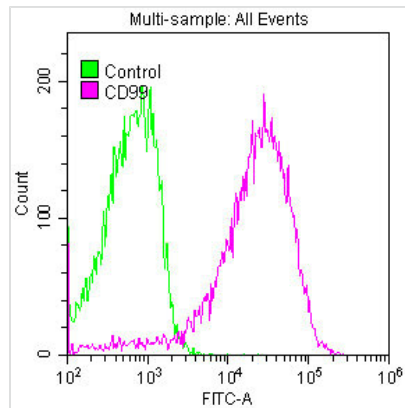


Western Blot

Positive WB detected in Jurkat whole cell lysate
 All lanes CD99 antibody at 0.8µg/ml
 Secondary
 Goat polyclonal to rabbit IgG at 1/50000 dilution
 Predicted band size: 28 KDa
 Observed band size: 28 KDa



IHC image of CSB-RA004973A0HU diluted at 1:100 and staining in paraffin-embedded human pancreatic tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Overlay histogram showing Jurkat cells stained with CSB-RA004973A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4°C. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Description

The CD99 recombinant monoclonal antibody is produced using advanced protein technology and DNA recombinant techniques. It begins with immunizing animals with a synthesized peptide derived from human CD99, followed by the isolation of B cells. From these B cells, positive ones are selected and subjected to single clone identification. The genes encoding the light and heavy chains of the CD99 antibody are then amplified using PCR and inserted into a plasmid vector. This recombinant vector is introduced into host cells for antibody expression. The CD99 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. It undergoes rigorous validation to ensure its accuracy and reliability for ELISA, WB, IHC, and FC applications. This product is specifically designed to target the CD99 antigen in human species, making it an essential tool for researchers in the field of immunology.

CD99, also known as MIC2, is a transmembrane protein that is extensively O-glycosylated and found on leukocytes and active endothelium. CD99 regulates cell adhesion and migration, cell death and differentiation, intracellular protein trafficking, endocytosis, and exocytosis, among other important biological processes. CD99, in particular, functions as an oncosuppressor in tumors or as a prerequisite for cell malignancy. CD99 has been shown to have an impact on tumor cell differentiation, migration, invasion, and metastasis.