

**CD59 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1775a**

**Specification**

**CD59 Antibody - Product Information**

Application	<b>E, WB, IF, FC, IHC</b>
Primary Accession	<a href="#">P13987</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>14.2kDa KDa</b>

**Description**

This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. This protein also plays a role in signal transduction pathways in the activation of T cells. Mutations in this gene cause CD59 deficiency, a disease resulting in hemolytic anemia and thrombosis, and which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene.

**Immunogen**

Purified recombinant fragment of human CD59 (AA: 31-111) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CD59 Antibody - Additional Information**

**Gene ID** 966

**Other Names**

CD59 glycoprotein, 1F5 antigen, 20 kDa homologous restriction factor, HRF-20, HRF20, MAC-inhibitory protein, MAC-IP, MEM43 antigen, Membrane attack complex inhibition factor, MACIF, Membrane inhibitor of reactive lysis, MIRL, Protectin, CD59, CD59, MIC11, MIN1, MIN2, MIN3, MSK21

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IF~~1/50 -1/200  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small

aliquots to prevent freeze-thaw cycles.

### Precautions

CD59 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## CD59 Antibody - Protein Information

**Name** CD59

**Synonyms** MIC11, MIN1, MIN2, MIN3, MSK21

### Function

Potent inhibitor of the complement membrane attack complex (MAC) action. Acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. Involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase.

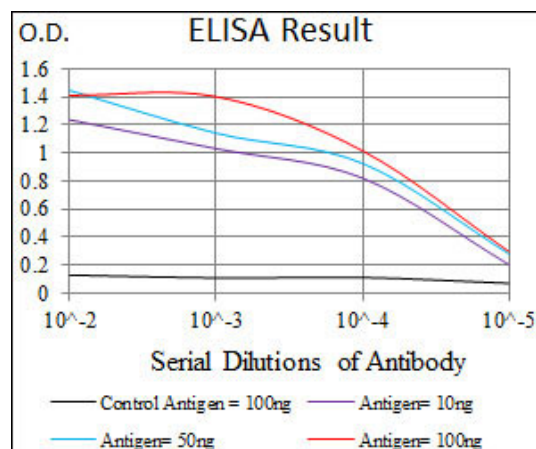
### Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Soluble form found in a number of tissues

## CD59 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



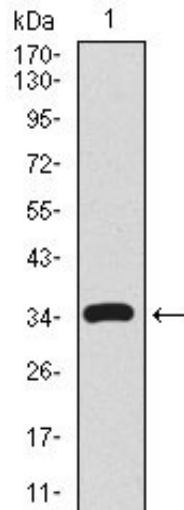


Figure 1: Western blot analysis using CD59 mAb against human CD59 recombinant protein. (Expected MW is 34.7 kDa)

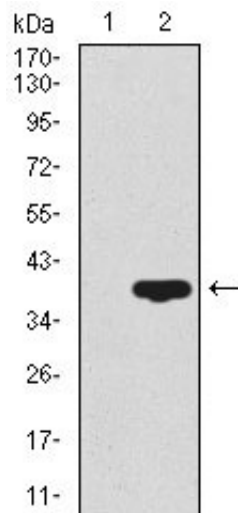


Figure 2: Western blot analysis using CD59 mAb against HEK293 (1) and CD59 (AA: 31-111)-hIgGFc transfected HEK293 (2) cell lysate.

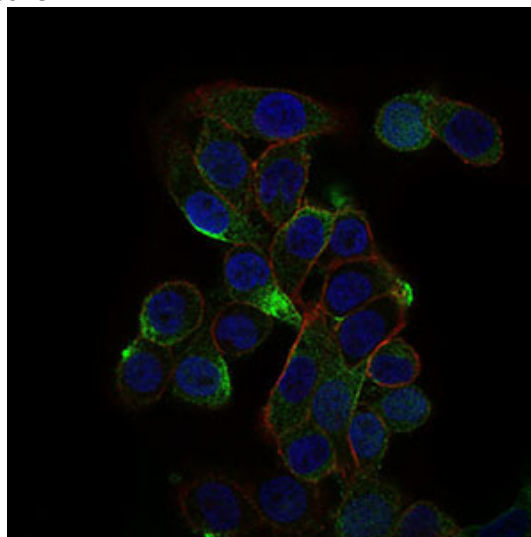


Figure 3: Immunofluorescence analysis of MCF-7 cells using CD59 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

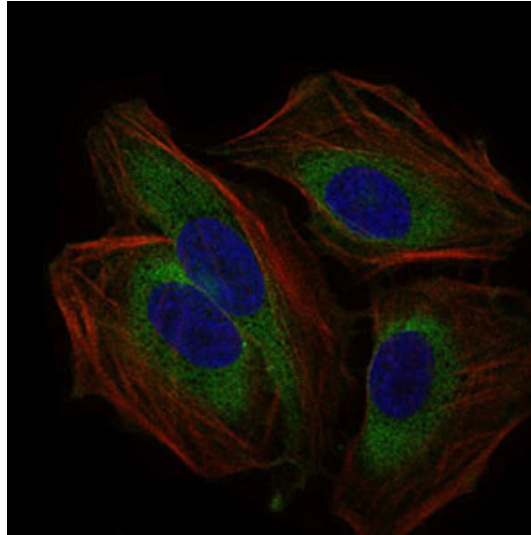


Figure 4: Immunofluorescence analysis of HeLa cells using CD59 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

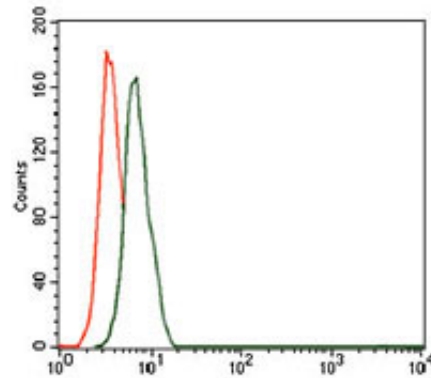


Figure 5: Flow cytometric analysis of HeLa cells using CD59 mouse mAb (green) and negative control (red).

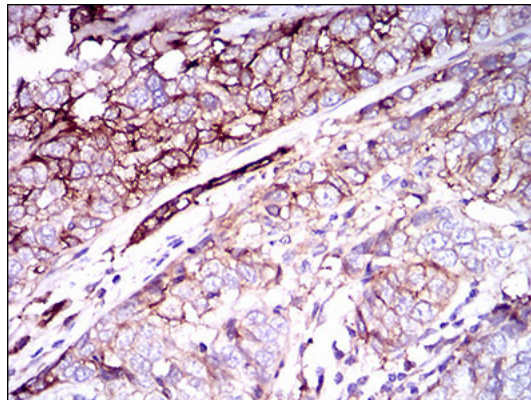


Figure 6: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using CD59 mouse mAb with DAB staining.

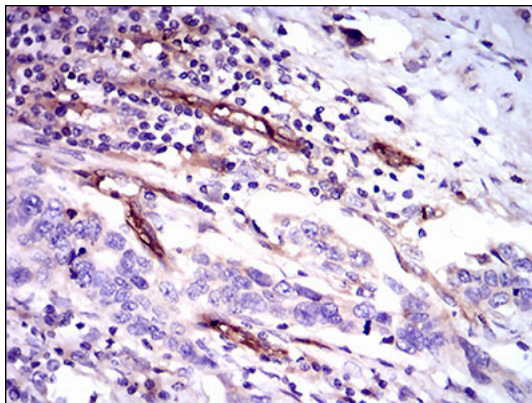


Figure 7: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using CD59 mouse mAb with DAB staining.

### **CD59 Antibody - References**

1. Cell Immunol. 2010;265(2):127-32.
2. Chin Med J (Engl). 2009 Sep 20;122(18):2123-8.