

**Anti-CD59 Antibody**  
Catalog # ABO12754**Specification****Anti-CD59 Antibody - Product Information**

Application	IHC, FC
Primary Accession	<a href="#">P13987</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for CD59 glycoprotein(CD59) detection. Tested with IHC-P, IHC-F, ICC, FCM in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-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

**Calculated MW**

14177 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat  
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml  
Immunocytochemistry, 0.5-1 µg/ml  
Flow Cytometry, 1-3<sup>1</sup>/<sub>4</sub>g/1x10<sup>6</sup>cells

**Subcellular Localization**

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

**Protein Name**

CD59 glycoprotein

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E.coli-derived human CD59 recombinant protein (Position: L26-N102). Human CD59 shares 47.1% amino acid (aa) sequence identity with rat CD59.

### Purification

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

### Sequence Similarities

Contains 1 UPAR/Ly6 domain.

## Anti-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

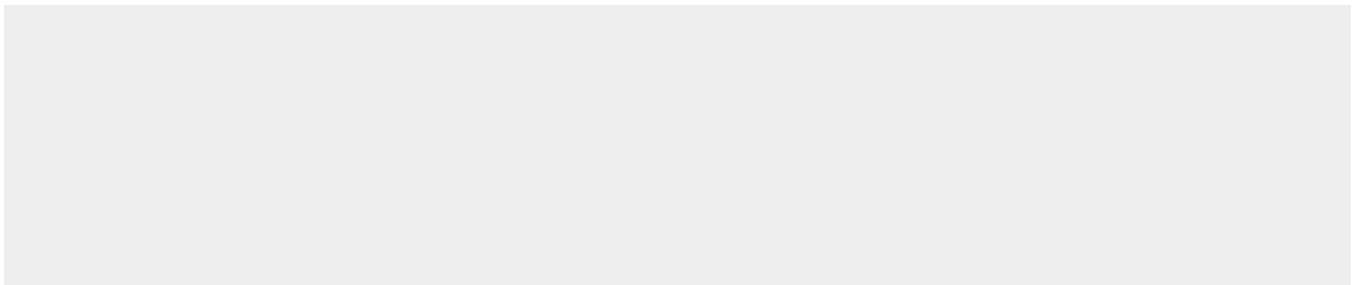
Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Soluble form found in a number of tissues

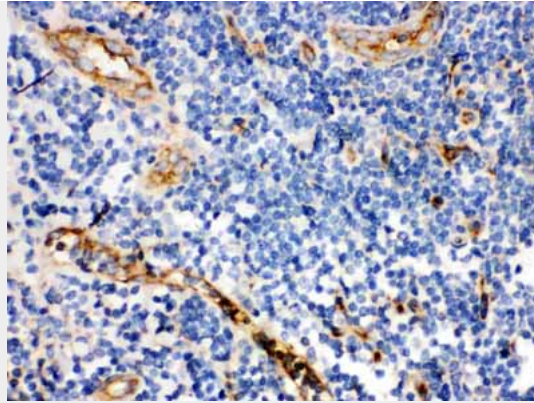
## Anti-CD59 Antibody - Protocols

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](#)

## Anti-CD59 Antibody - Images





Anti- CD59 antibody, ABO12754, IHC(P)IHC(P): Human Tonsil Tissue

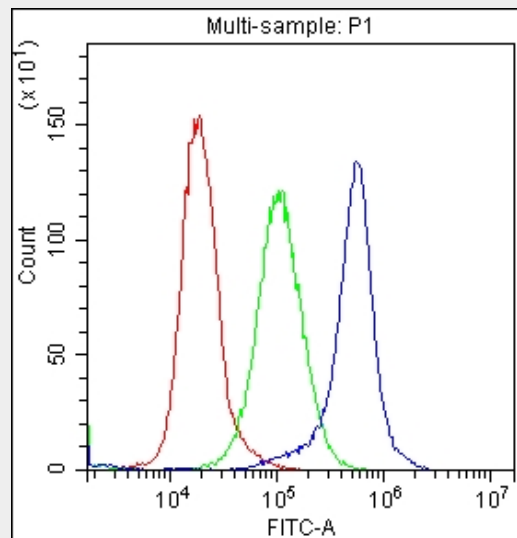


Figure 2. Flow Cytometry analysis of K562 cells using anti-CD59 antibody (ABO12754). Overlay histogram showing K562 cells stained with ABO12754 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD59 Antibody (ABO12754, 1 $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 20 $\text{^\circ}$ C. DyLight<sup>488</sup> conjugated goat anti-rabbit IgG (BA1127, 5-10 $\mu$ g/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20 $\text{^\circ}$ C. Isotype control antibody (Green line) was rabbit IgG (1 $\mu$ g/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

### Anti-CD59 Antibody - Background

This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. And 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. It 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.