

## **Anti-CD59 Antibody**

**Catalog # ABO12754** 

### **Specification**

## **Anti-CD59 Antibody - Product Information**

Application IHC, FC
Primary Accession P13987
Host 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  $\mu$ g/ml, By Heat<br/>br>Immunohistochemistry(Frozen Section), 0.5-1  $\mu$ g/ml<br/>br><br/>Immunocytochemistry, 0.5-1  $\mu$ g/ml<br/>cytometry, 1-3 $\hat{l}^{1}$ 4g/1x10<sup>6</sup>cells<br/>br>

#### **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 Na2HPO4, 0.05mg NaN3.

#### **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

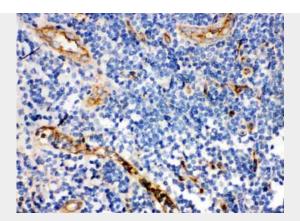
### **Anti-CD59 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-CD59 Antibody - Images





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

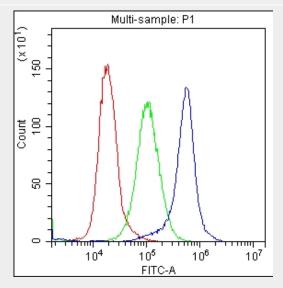


Figure 2. Flow Cytometry analysis of K562 cells using anti-CD59 antibody (ABO12754). Overlay histogram showing K562 cells stained with ABO12754 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD59 Antibody (ABO12754,1 $\hat{1}^{1}$ /4g/1x106 cells) for 30 min at 20 $\hat{A}^{\circ}$ C. DyLight?488 conjugated goat anti-rabbit IgG (BA1127, 5-10 $\hat{1}^{1}$ /4g/1x106 cells) was used as secondary antibody for 30 minutes at 20 $\hat{A}^{\circ}$ C. Isotype control antibody (Green line) was rabbit IgG (1 $\hat{1}^{1}$ /4g/1x106) 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.