

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

Anti-CD59 Antibody - Product Information

Application	IHC-P, IHC-F, FC, ICC
Primary Accession	P13987
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, 1-3¹/₄g/1x10⁶cells

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 Na₃.

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 reconstitution, 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 {ECO:0000303|PubMed:2475570, ECO:0000312|HGNC:HGNC:1689}

Function

Potent inhibitor of the complement membrane attack complex (MAC) action, which protects human cells from damage during complement activation (PubMed:11882685, PubMed:1698710, PubMed:2475111, PubMed:2475570, PubMed:2606909, PubMed:9053451). Acts by binding to the beta-2-microglobulin of C8 (C8A and C8B) components of the assembling MAC, forming an intermolecular beta-sheet that prevents incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore (PubMed:11882685, PubMed:1698710, PubMed:36797260).

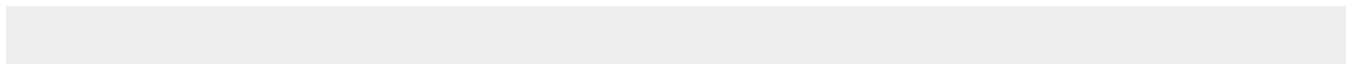
Cellular Location

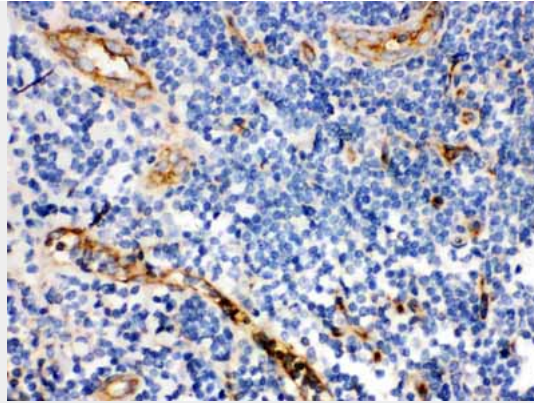
Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Localizes to the cell surface (PubMed:36797260). Soluble form found in a number of tissues (PubMed:8670172).

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

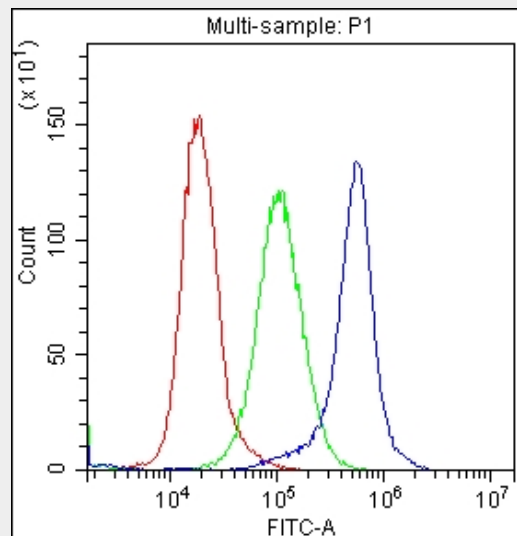


Figure 2. Flow Cytometry analysis of K562 cells using anti-CD59 antibody (ABO12754). Overlay histogram showing K562 cells stained with ABO12754 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD59 Antibody (ABO12754, $1\frac{1}{4}$ g/1x10⁶ cells) for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