

**CD59 Antibody**  
Catalog # ASC11617**Specification****CD59 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P13987</a>
Other Accession	<a href="#">NP_000602</a> , <a href="#">10835165</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	14 kDa KDa
Application Notes	CD59 antibody can be used for detection of CD59 by Western blot at 1 - 2 µg/mL.

**CD59 Antibody - Additional Information**

Gene ID	966
Target/Specificity	CD59;

**Reconstitution & Storage**

CD59 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

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

**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](http://www.uniprot.org/citations/11882685), PubMed:[1698710](http://www.uniprot.org/citations/1698710), PubMed:[2475111](http://www.uniprot.org/citations/2475111), PubMed:[2475570](http://www.uniprot.org/citations/2475570), PubMed:[2606909](http://www.uniprot.org/citations/2606909), PubMed:[9053451](http://www.uniprot.org/citations/9053451)). Acts by binding to the beta-haipins 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](http://www.uniprot.org/citations/11882685), PubMed:[1698710](http://www.uniprot.org/citations/1698710), PubMed:[36797260](http://www.uniprot.org/citations/36797260)).

### Cellular Location

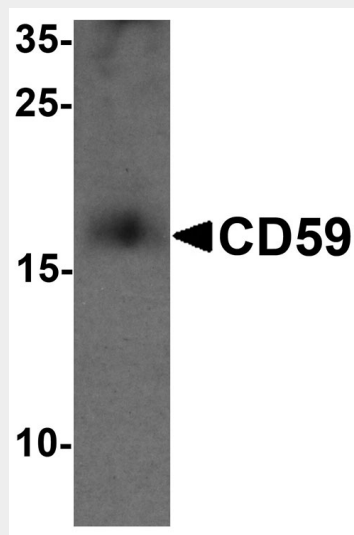
Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Localizes to the cell surface (PubMed:36797260). Soluble form found in a number of tissues (PubMed:8670172).

### 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](#)

### CD59 Antibody - Images



Western blot analysis of CD59 in mouse spleen tissue lysate with CD59 antibody at 1 µg/mL

### CD59 Antibody - Background

CD59 Antibody: The complement regulatory protein CD59 is a cell surface glycoprotein that regulates complement-mediated cell lysis and is involved in lymphocyte signal transduction. CD59 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. CD59 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 ultimately cerebral infarction.

### CD59 Antibody - References

Venneker GT and Asghar SS. CD59: a molecule involved in antigen presentation as well as downregulation of membrane attack complex. *Exp. Clin. Immunogenet.* 1992; 9:33-47.  
Kimberly FC, Sivasankar B, and Paul Morgan B. Alternative roles for CD59. *Mol. Immunol.* 2007;

44:73-81.

Ninomiya H and Sims PJ. The human complement regulatory protein CD59 binds to the alpha-chain of C8 and to the "b" domain of C9. *J. Biol. Chem.* 1992; 267:13675-80.

Deckert M, Ticchioni M, Mari B, et al. The glycosylphosphatidylinositol-anchored CD59 protein stimulates both T cell receptor zeta/ZAP-70-dependent and -independent signaling pathways in T cells. *Eur. J. Immunol.* 1995; 25:1815-22