

**Anti-CD59 (glycoprotein) Antibody**  
Catalog # AN1698**Specification****Anti-CD59 (glycoprotein) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P13987</a>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	14177

**Anti-CD59 (glycoprotein) Antibody - Additional Information**

Gene ID 966

**Other Names**

CD59 glycoprotein, 1F5 antigen, HRF-20, HRF20, MAP-IP, MAC inhibitory protein, MEM43, MACIF, MIRL, MIC11, MIN1, MIN2, MIN3, MSK21

**Target/Specificity**

CD59 is a GPI-anchored membrane protein that is an inhibitor of the complement membrane attack complex (MAC). CD59 binds to complement components C8 and C9, preventing C9 polymerization and insertion into membranes. Rare cases of CD59 deficiency have been reported to cause paroxysmal nocturnal hemoglobinuria in human patients. Expression of CD59 on tumor cells and viral infected cells makes them resist antibody-dependent complement-mediated lysis. Inhibitors of CD59 expression or activity may suppress tumor cell resistance to complement-mediated attack, and these technologies have been actively pursued for therapeutic applications. In addition, CD59 may regulate insulin secretion by modulating exocytosis, and a glycosylated form of CD59 with no MAC inhibitory activity is found in diabetic patients.

**Format**

Protein G Purified

**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**

Anti-CD59 (glycoprotein) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

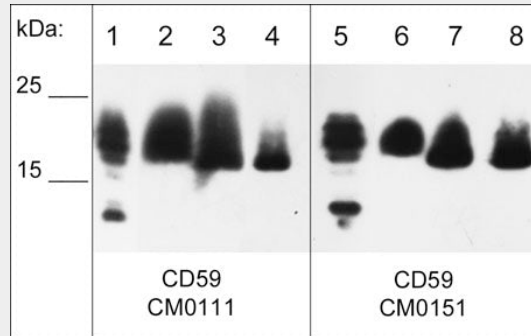
Blue Ice

**Anti-CD59 (glycoprotein) Antibody - Protocols**

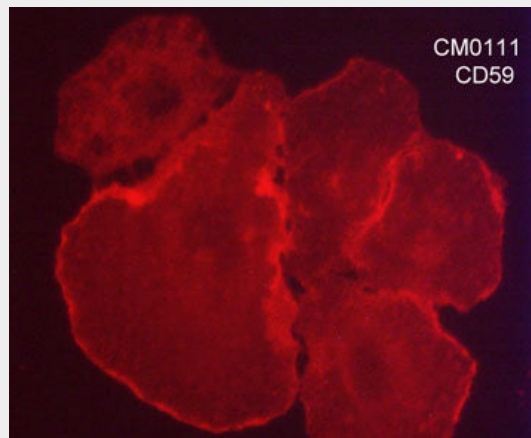
Provided below are standard protocols that you may find useful for product applications.

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

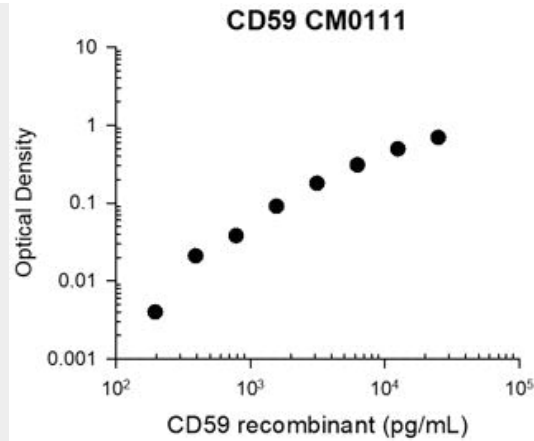
**Anti-CD59 (glycoprotein) Antibody - Images**



Western blot analysis of recombinant human CD59 protein (lanes 1 & 5), A431 (lanes 2 & 6), A549 (lanes 3 & 7), and MCF7 (lanes 4 & 8) whole cell lysates under native conditions. The blots were probed with mouse monoclonal anti-CD59 (CM0111) at 1:1000 (lanes 1-4) and anti-CD59 (CM0151) at 1:1000 (lanes 5-8).



Immunocytochemical labeling of CD59 in paraformaldehyde fixed human A549 cells. The cells were labeled with mouse monoclonal anti-CD59 (clone M011). The antibody was detected using goat anti-mouse Ig DyLight® 594.



Representative Standard Curve using mouse monoclonal anti-CD59 (CM0111) for ELISA capture of human recombinant CD59 extracellular region with His-tag. Capture was detected by using an anti-His-tag antibody followed by appropriate secondary antibody conjugated to HRP.

### **Anti-CD59 (glycoprotein) Antibody - Background**

CD59 is a GPI-anchored membrane protein that is an inhibitor of the complement membrane attack complex (MAC). CD59 binds to complement components C8 and C9, preventing C9 polymerization and insertion into membranes. Rare cases of CD59 deficiency have been reported to cause paroxysmal nocturnal hemoglobinuria in human patients. Expression of CD59 on tumor cells and viral infected cells makes them resist antibody-dependent complement-mediated lysis. Inhibitors of CD59 expression or activity may suppress tumor cell resistance to complement-mediated attack, and these technologies have been actively pursued for therapeutic applications. In addition, CD59 may regulate insulin secretion by modulating exocytosis, and a glycosylated form of CD59 with no MAC inhibitory activity is found in diabetic patients.