10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CD59 (glycoprotein) Antibody
Catalog # AN1698

Specification

Anti-CD59 (glycoprotein) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P13987
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 glycated 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

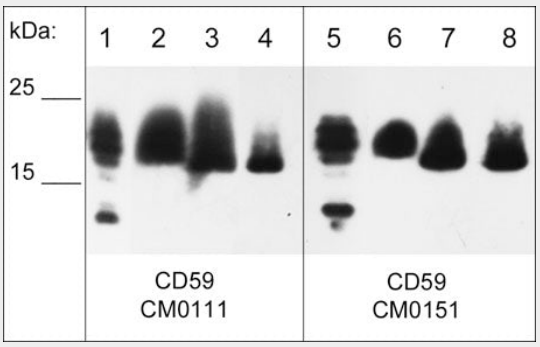
Anti-CD59 (glycoprotein) Antibody - Protocols

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

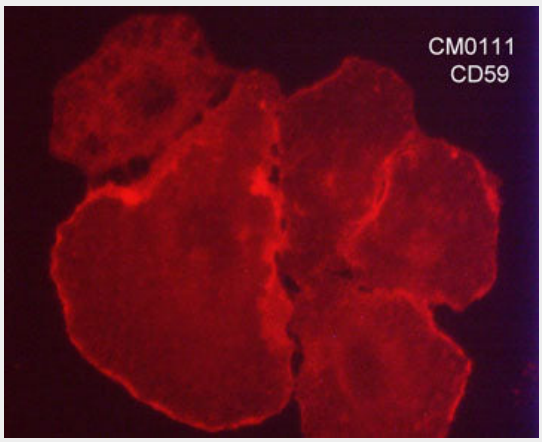
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD59 (glycoprotein) Antibody - Images

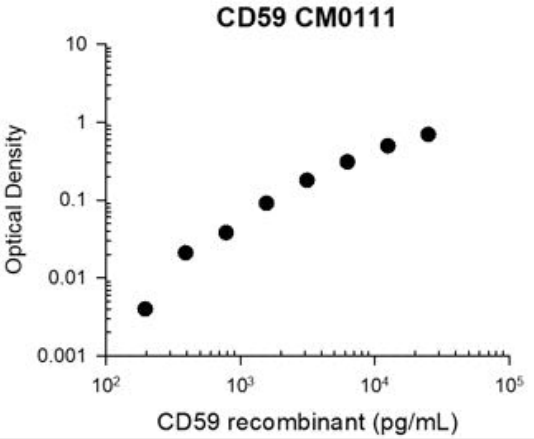


Western blot analysis of recombinant human CD59 protein (lanes 1 & 5), A431 (lanes 2 & 6), A549 (lanes 3 & 7), and MCF7 (lanes 4 & 8) whole cell lysates under native conditions. The blots were probed with mouse monoclonal anti-CD59 (CM0111) at 1:1000 (lanes 1-4) and anti-CD59 (CM0151) at 1:1000 (lanes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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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 glycated form of CD59 with no MAC inhibitory activity is found in diabetic patients.