

Anti-CD59 (glycoprotein) Antibody

Catalog # AN1699

Specification

Anti-CD59 (glycoprotein) Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>P13987</u>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG2b
Calculated MW	14177
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.

Dilution WB~~1:1000 IHC~~1:100~500

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

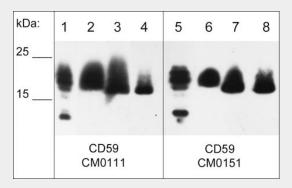


Anti-CD59 (glycoprotein) Antibody - Protocols

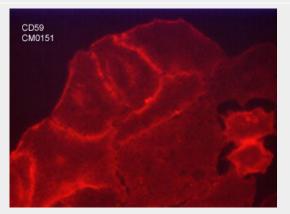
Provided below are standard protocols that you may find useful for product applications.

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

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 M015). The antibody was detected using goat anti-mouse Ig DyLight® 594.

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.