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

CD59 Antibody
Rat Monoclonal Antibody
Catalog # ALS13924

Specification

CD59 Antibody - Product Information

Application	**WB, IHC-P, IHC-F, FC**
Primary Accession	P13987
Reactivity	**Human**
Host	**Rat**
Clonality	**Monoclonal**
Calculated MW	**14kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IHC-F~~N/A** **FC~~1:10~50**

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

Target/Specificity
Recognizes the human CD59 cell surface antigen, an 18-20kD GPI linked glycoprotein broadly expressed by human leucocytes and erythrocytes. Clone YTH53.1 has been shown to block the normal function of CD59. Removal of sodium azide is recommended prior ...

Reconstitution & Storage
+4°C or -20°C, Avoid repeated freezing and thawing.

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, PubMed:1698710, PubMed:2475111, PubMed:<a

href="http://www.uniprot.org/citations/2475570" target="_blank">2475570, PubMed:2606909, PubMed: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, PubMed:1698710, PubMed:36797260).

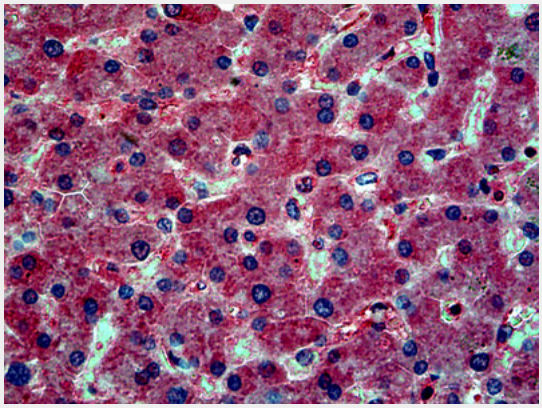
Cellular Location
Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Localizes to the cell surface (PubMed:36797260). Soluble form found in a number of tissues (PubMed:8670172).

CD59 Antibody - Protocols

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

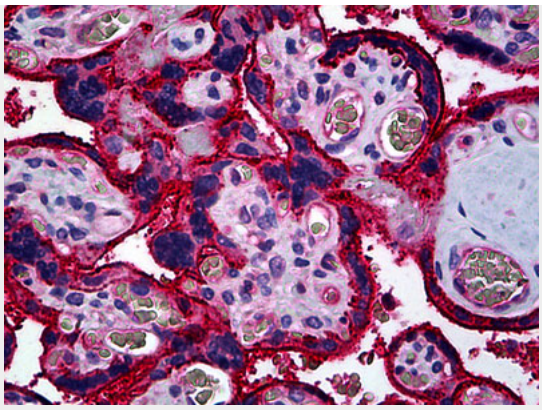
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD59 Antibody - Images



Anti-CD59 antibody IHC of human liver.

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



Anti-CD59 antibody IHC of human placenta.

CD59 Antibody - Background

Potent inhibitor of the complement membrane attack complex (MAC) action. Acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. Involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase.

CD59 Antibody - References

Davies A.,et al.J. Exp. Med. 170:637-654(1989).
Philbrick W.M.,et al.Eur. J. Immunol. 20:87-92(1990).
Okada H.,et al.Biochem. Biophys. Res. Commun. 162:1553-1559(1989).
Sugita Y.,et al.J. Biochem. 106:555-557(1989).
Sawada R.,et al.DNA Cell Biol. 9:213-220(1990).