



# CD59 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-13990                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Name</b>                   | CD59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from the Internal region of human CD59. AA range:51-100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Specificity</b>                 | CD59 Monoclonal Antibody detects endogenous levels of CD59 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Synonyms</b>                    | 20 kDa homologous restriction factor;CD 59;CD59 antigen;CD59 glycoprotein;HRF-20;CD59;MIC11;MIN1;MIN2;MIN3;MSK21;1F5 antigen;HRF20;MAC-inhibitory protein;MAC-IP;MEM43 antigen;Membrane attack complex inhibition factor;MACIF;Membrane inhibitor of reactive lysis;MIRL;Protectin                                                                                                                                                                                                                                                                                                                                                            |
| <b>Observed Band</b>               | 16kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Calculated Molecular Weight</b> | 16kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cell Pathway</b>                | Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Soluble form found in a number of tissues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Tissue Specificity</b>          | Blood,Colon,Heart,Milk,T-cell,Urine,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Function</b>                    | disease:Defects in CD59 are the cause of CD59 deficiency [MIM:612300]., function: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.,function:The soluble form from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC |



assembly on cell membranes.,online information:CD59 mutation db,  
PTM:Glycated. Glycation is found in diabetic subjects, but only at minimal levels  
in nondiabetic subjects. Glycated CD59 lacks MAC-inhibitory function and  
confers to vascular complications of diabetes.,PTM:N- and O-

#### Background

This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein 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. This protein 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 which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008],

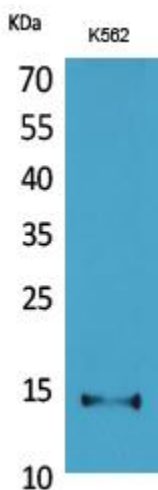
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using CD59 Monoclonal Antibody