

Mouse CD59a / Protectin / MAC-IP Protein (His Tag)

Catalog Number: 50724-M08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

AA987121; Cd59; protectin; RP24-297H17.1

Protein Construction:

A DNA sequence encoding the mouse CD59a (NP_001104530.1) (Met 1-Lys 95), without the pro peptide, was fused with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Leu 24

Molecular Mass:

The secreted recombinant mouse CD59a comprises 83 amino acids and has a calculated molecular mass of 9.7 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 18 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

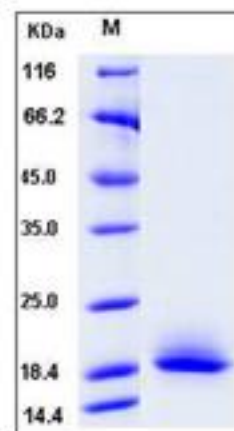
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Protectin, a complement regulatory protein, also known as CD59, or MIRL (membrane inhibitor of reactive lysis) is a small protein that inhibits the complement membrane attack complex by binding C5b678 and preventing C9 from binding and polymerizing. The amino-terminal 25 amino acids represented a typical signal peptide sequence and the carboxy-terminal hydrophobic amino acids were characteristic for phosphatidylinositol-anchored proteins. It was found that the CD59/Protectin antigen is a small protein sometimes associated with larger components (45 and 80 kD) in urine. CD59/Protectin antigen was released from the surface of transfected COS cells by phosphatidylinositol-specific phospholipase C, demonstrating that it is attached to the cell membrane by means of a glycolipid anchor; it is therefore likely to be absent from the surface of affected erythrocytes in the disease paroxysmal nocturnal hemoglobinuria.

References

1. Huang Y, *et al.* (2006) Defining the CD59-C9 binding interaction. *J Biol Chem.* 281 (37): 27398-404. 2. Sawada R, *et al.* (1990) Isolation and expression of the full-length cDNA encoding CD59 antigen of human lymphocytes. *DNA Cell Biol.* 9(3): 213-20. 3. Philbrick WM, *et al.* (1990) The CD59 antigen is a structural homologue of murine Ly-6 antigens but lacks interferon inducibility. *Eur J Immunol.* 20(1): 87-92.

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