

Rat CD59 / CD59A / MAC-IP Protein (Fc Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 80299-R02H

General Information

Gene Name Synonym:

CD59

Protein Construction:

A DNA sequence encoding the rat CD59 (P27274) (Met1-Asn100) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: (55.3+31.4) % 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 23

Molecular Mass:

The recombinant rat CD59 /Fc is a disulfide-linked homodimer. The reduced monomer comprises 319 amino acids and has a predicted molecular mass of 35.8 kDa. The apparent molecular mass of the protein is approximately 40 and 43 kDa 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:

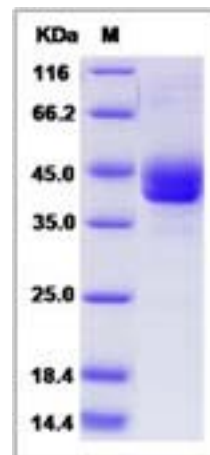
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD59 glycoprotein, also known as 20 kDa homologous restriction factor, HRF20, MAC-inhibitory protein, Membrane attack complex inhibition factor, Membrane inhibitor of reactive lysis, MIC11, MIRL and CD59, is a cell membrane protein which contains one UPAR/Ly6 domain. CD59 is a small, highly glycosylated, GPI-linked protein, with a wide expression profile. The soluble form of CD59 from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC assembly on cell membranes. CD59 is a potent inhibitor of the complement membrane attack complex (MAC) action. CD59 was first identified as a regulator of the terminal pathway of complement. It 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. CD59 is involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase. Defects in CD59 are the cause of CD59 deficiency (CD59D).

References

1.Fletcher CM. et al., 1994, Structure. 2: 185-99. 2.Rudd PM. et al., 1997, J Biol Chem. 272: 7229-44. 3.Kimberley FC. et al., 2007, Mol Immunol. 44 (1-3): 73-81.

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For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>