Human CD59 Protein (His Tag)

Catalog Number: 12474-H08H

General Information

Gene Name Synonym:

16.3A5; 1F5; EJ16; EJ30; EL32; FLJ38134; FLJ92039; G344; HRF-20; HRF20; MAC-IP; MACIF; MEM43; MGC2354; MIC11; MIN1; MIN2; MIN3; MIRL; MSK21; p18-20

Protein Construction:

A DNA sequence encoding the mature form of human CD59 (P13987-1) (Met 1-Glu 101) without the pro peptide was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

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 ℃

Predicted N terminal: Leu 26

Molecular Mass:

The recombinant human CD59 consists of 87 amino acids and has a predicted molecular mass of 10.2 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhCD59 is approximately 13-19 kDa due to glycosylation.

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:

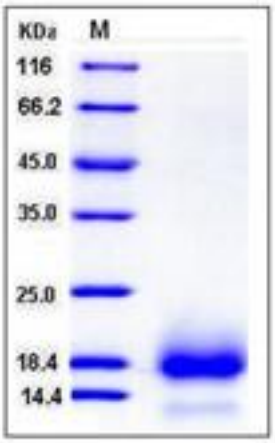
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.