Cynomolgus CD59 / CD59A / MAC-IP Protein (His Tag)

Catalog Number: 90188-C08H



General Information

Gene Name Synonym:

CD59

Protein Construction:

A DNA sequence encoding the cynomolgus CD59 (G7PQF7) (Met1-Glu101) was expressed with a polyhistidine tag at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

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

Predicted N terminal: Leu 26

Molecular Mass:

The recombinant cynomolgus CD59 comprises 87 amino acids and has a calculated molecular mass of 10.2 KDa. The apparent molecular mass of it is approximately 18 and 14 KDa respectively in SDS-PAGE.

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

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

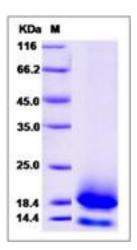
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD59 glycoprotein, also known as 2 kDa homologous restriction factor, HRF2, 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

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