

Synonym

CD59,16.3A5,1F5,EJ16,EJ30,EL32,FLJ38134,FLJ92039,G344,HRF20,MAC-IP,MACIF,MEM43,MGC2354,MIC11,MIN1,MIN2,MIN3,MIRL,MSK21,p18-20,Protectin

Source

Human CD59, His Tag (CD9-H52H9) is expressed from human 293 cells (HEK293). It contains AA Leu 26 - Asn 102 (Accession # [P13987-1](#)).

Predicted N-terminus: Leu 26

Molecular Characterization

CD59(Leu 26 - Asn 102)
P13987-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 10.8 kDa. The protein migrates as 15-18 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

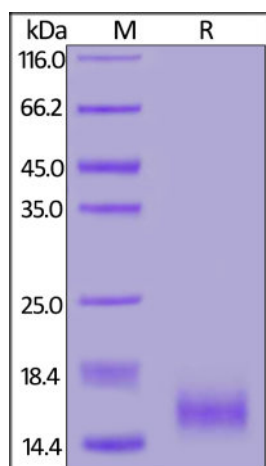
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human CD59, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

CD59, also known as membrane attack complex inhibition factor (MACIF), Protectin, 1F5 antigen, HRF-20 and MIRL. CD59 has been identified as a glycosylphosphatidylinositol-anchored membrane protein that acts as an inhibitor of the formation of the membrane attack complex to regulate complement activation. 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.

References

- (1) [Zhang R, et al. Future Oncol. 2018. 14\(8\):781-791.](#)
- (2) [Höchsmann B, et al. Hematol Oncol Clin North Am. 2015. 29\(3\):495-507.](#)
- (3) [Fülöp G, et al. Biomolecules. 2018. 8\(2\).](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.