

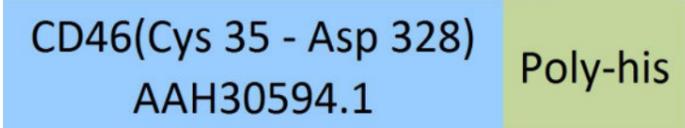
**Synonym**

CD46,AHUS2,MCP,MIC10,TLX,TRA2.10

**Source**

Human CD46, His Tag (CD6-H5226) is expressed from human 293 cells (HEK293). It contains AA Cys 35 - Asp 328 (Accession # AAH30594.1).

Predicted N-terminus: Cys 35

**Molecular Characterization**


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

The protein has a calculated MW of 33.6 kDa. The protein migrates as 45-60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% 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.*

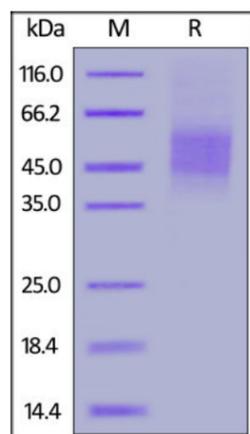
**Storage**

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 CD46, 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 90%.

**Background**

Complement regulatory protein CD46 is also known as membrane Cofactor Protein (MCP), is a type I membrane protein and is a regulatory part of the complement system. CD46 is expressed by all cells except erythrocytes. MCP acts as a cofactor for complement factor I, a serine protease which protects autologous cells against complement-mediated injury by cleaving C3b and C4b deposited on host tissue, and also acts as a costimulatory factor for T-cells which induces the differentiation of CD4+ into T-regulatory 1 cells. In T-cells by binding to CD46, A number of viral and bacterial pathogens seem to exploit this property and directly induce an immunosuppressive phenotype. Defects in CD46 are a cause of susceptibility to hemolytic uremic syndrome atypical type 2 (AHUS2).

## References

- (1) [Lublin D.M., et al., 1988, J. Exp. Med. 168:181-194.](#)
- (2) [Astier A., et al., 2000, J. Immunol. 164:6091-6095.](#)
- (3) [Noris M., et al., 2003, Lancet 362:1542-1547.](#)
- (4) [Kemper C., et al., 2003, Nature 421:388-392.](#)

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.