Synonym

CFD,Adipsin,PFD,DF,Complement factor D

Source

Rhesus macaque Complement Factor D, Fc Tag (CFD-R5255) is expressed from human 293 cells (HEK293) and inactive. It contains AA Ile 26 - Ala 253 (Accession # H9EXC1-1).
Predicted N-terminus: Ile 26

Molecular Characterization

CFD(Ile 26 - Ala 253) H9EXC1-1	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 51.0 kDa. The protein migrates as 53 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
Tris with Glycine, Arginine and NaCl, pH7.5. 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.

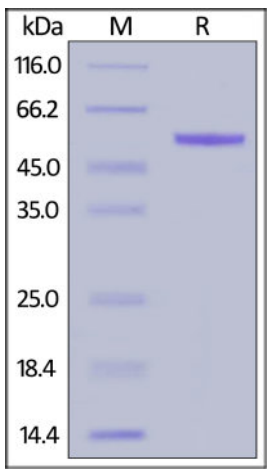
Storage

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



Rhesus macaque Complement Factor D, Fc 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

Complement factor D (CFD) is also known as Adipsin, C3 convertase activator, Properdin factor D (PFD), which contains one peptidase S1 domain and belongs to the peptidase S1 family. CFD / Adipsin cleaves factor B when the latter is complexed with factor C3b, activating the C3bbb complex, which then becomes the C3 convertase of the alternate pathway. CFD / Adipsin is a serine protease that stimulates glucose transport for triglyceride accumulation in fats cells and inhibits lipolysis. Defects in CFD / Adipsin are the cause of complement factor D deficiency which predisposes to invasive meningococcal disease.

References

(1) White R.T., et al., 1992, J. Biol. Chem. 267:9210-9213.

(2) Johnson D.M.A., et al., 1984, FEBS Lett. 166:347-351.

(3) Sprong T., et al., 2006, Blood 107:4865-4870.

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