

RP01367

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# Recombinant Human Complement factor D/CFD Protein

Catalog No.: RP01367 **Recombinant**

## Sequence Information

**Species** HEK293 cells  
**Gene ID** 1675  
**Swiss Prot** P00746

### Tags

C-His

### Synonyms

CFD;ADIPSIN;ADN;DF;PFD

## Product Information

**Source** HEK293 cells  
**Purification** ≥ 95 % as determined by SDS-PAGE; ≥95 % as determined by HPLC.

### Endotoxin

< 0.1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## Background

Complement factor D, also known as Adipsin, C3 convertase activator, Properdin factor D and CFD is a secreted protein which belongs to the peptidase S1 family. CFD/Adipsin contains one peptidase S1 domain. Complement factor D ( CFD/Adipsin ) is a component of the alternative complement pathway best known for its role in humoral suppression of infectious agents. Complement factor D ( CFD/Adipsin ) has a high level of expression in fat, suggesting a role for adipose tissue in immune system biology. This protein is also a serine protease that is secreted by adipocytes into the bloodstream. Complement factor D ( 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. Its function is homologous to that of C1s in the classical pathway. Complement factor D ( CFD/Adipsin ) is a serine protease that stimulates glucose transport for triglyceride accumulation in fat cells and inhibits lipolysis. Defects in CFD/Adipsin are the cause of complement factor D deficiency (CFD deficiency) which predisposes to invasive meningococcal disease.

## Basic Information

### Description

Recombinant Human Complement factor D/CFD Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ile26-Ala253) of human CFD/Adipsin/PFD (Accession #NP\_001919.2.) fused with a 6×His tag at the C-terminus.

### Bio-Activity

Measured by its ability to cleave a colorimetric peptide substrate, N-carbobenzyloxy-Lys-ThioBenzyl ester (Z-Lys-SBzl), in the presence of 5,5' Dithio-bis (2-nitrobenzoic acid) (DTNB). The specific activity is >452.49 pmol/min/μg.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

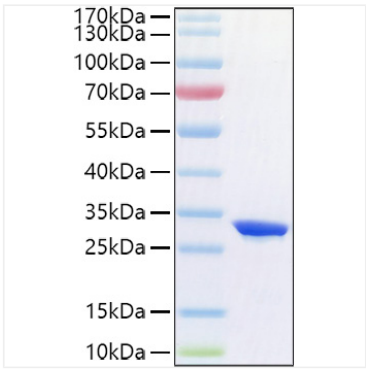
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

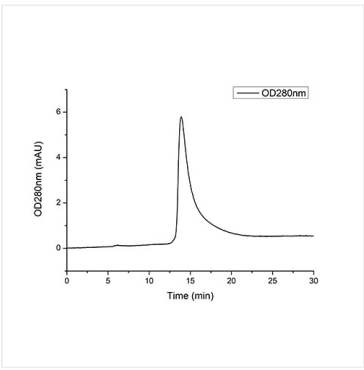
Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Complement factor D/CFD Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of Human CFD/Adipsin/PFD Protein (Cat.RP01367) was greater than 95% as determined by SEC-HPLC.