

# Human Adipsin / Complement Factor D / CFD Protein (His Tag)

Catalog Number: 10160-H08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

ADIPSIN; ADN; DF; FACTOR D; PFD

### Protein Construction:

A DNA sequence encoding the mature form of human CFD (P00746) (Ile 26-Ala 253) was fused with a C-terminal polyhistidine tag and a signal peptide at the N-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Endotoxin:

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

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Ile 26

### Molecular Mass:

The secreted recombinant human CFD consists of 239 amino acids and predicts a molecular mass of 25.8 kDa. As a result of glycosylation, rh CFD migrates as an approximately 33 kDa band in SDS-PAGE under reducing conditions.

### 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

### Storage:

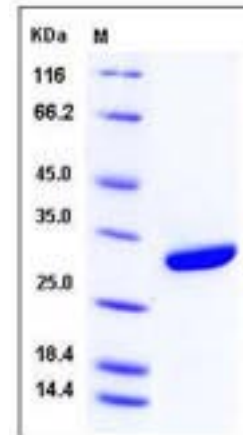
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

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.

## References

1. Volanakis JE, et al., 1996, Protein Sci. 5 (4): 553-64.
2. Searfoss, G.H et al., 2003, J Biol Chem. 278 (46):46107-16.
3. Ukkola, O. et al., 2003, Eur J Clin Nutr. 57 (9):1073-8.

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