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

Catalog Number: 50539-M08H



## **General Information**

## Gene Name Synonym:

Adn; DF

#### **Protein Construction:**

A DNA sequence encoding the full length of mouse CFD isoform 2 (P03953-2) (Met 1-Ser 258) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 98 % as determined by SDS-PAGE

**Endotoxin:** 

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt  $\,$  at -70  $\,$   $^{\circ}$ C

Predicted N terminal: Gln 20

## **Molecular Mass:**

The recombinant mouse CFD consists of 249 amino acids and has a predicted molecular mass of 27.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm CFD is approximately 40-45 kDa due to glycosylation.

## 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:

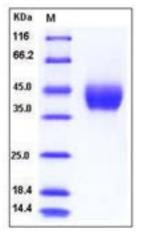
Store it under sterile conditions at -20  $^{\circ}$ C to -80  $^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 thepeptidase S1 family. CFD / Adipsin contains onepeptidase 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 fats 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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