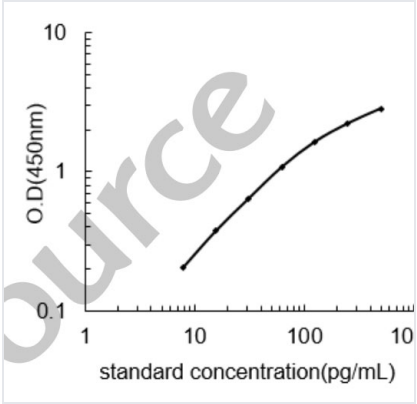
# Complement Factor D (CFD) ELISA Kit for Human

## PRODUCT OVERVIEW

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| **Product Name** | Complement factor D (CFD), ELISA Kit |
| **Full Product Name** | Human Complement factor D ELISA Kit |
| **Product Gene Name** | CFD elisa kit |
| **Product Synonym Names** | Complement factor D; Adipsin; C3 convertase activator; Properdin factor D; CFD; DF; PFD; 3.4.21.46 |
| **Species Reactivity** | Human |
| **Samples** | Serum, plasma, tissue homogenates, cell culture supernates or other biological fluids |
| **Detection Range** | 7.8-500 pg/mL |
| **Sensitivity** | < 3.9 pg/mL |
| **Specificity** | Recombinant and natural Human Complement factor D |
| **Preparation and Storage** | For long term storage, please store the entire kit at -20 degree C. |
| **Inter-assay Precision** | <=7.5% |
| **Intra-assay Precision** | <=3.8% |
| **Molecular Weight** | 27,033 Da |
| **OMIM** | 134350 |
| **3D Structure** | ModBase 3D Structure for P00746 |
| **Related Product Information for CFD elisa kit** | Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to target antigen. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for target antigen and then avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB substrate solution is added to each well. Only those wells that contain target antigen, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm ± 2 nm. The concentration of target antigen in the samples is then determined by comparing the O.D. of the samples to the standard curve.<br><br>Intended Uses: This immunoassay kit allows for the in vitro quantitative determination of target antigen concentrations in serum, plasma, tissue homogenates, cell culture supernates or other biological fluids. |
| **Other Notes** | Small volumes of CFD elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for CFD purchase** | MBS288907 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Complement factor D (CFD) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CFD. The ELISA analytical biochemical technique of the MBS288907 kit is based on CFD antibody-CFD antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CFD antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CFD. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%). |




**Typical Testing Data/Standard Curve (for reference only) of CFD elisa kit**

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CFD. It may not necessarily be applicable to this product.

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| **NCBI GI #** | 42544239 |
| **NCBI GeneID** | 1675 |
| **NCBI Accession #** | NP_001919.2 |
| **UniProt Primary Accession #** | P00746 |
| **UniProt Secondary Accession #** | Q5U5S1; Q86VJ5; Q8N4E0; Q8WZB4; B4DV76 |
| **UniProt Related Accession #** | P00746 |
| **GenBank Nucleotide #** | NM_001928.3 |
| **NCBI Official Full Name** | complement factor D isoform 1 preproprotein |
| **NCBI Official Synonym Full Names** | complement factor D (adipsin) |
| **NCBI Official Symbol** | CFD |
| **NCBI Official Synonym Symbols** | DF; ADN; PFD; ADIPSIN |
| **UniProt Protein Name** | Complement factor D |
| **UniProt Synonym Protein Names** | Adipsin; C3 convertase activator; Properdin factor D |
| **Protein Family** | Complement factor |
| **UniProt Gene Name** | CFD |
| **UniProt Synonym Gene Names** | DF; PFD |
| **UniProt Entry Name** | CFAD_HUMAN |
| **NCBI Protein Information** | complement factor D |
| **NCBI Summary for CFD** | This gene encodes a member of the S1, or chymotrypsin, family of serine peptidases. This protease catalyzes the cleavage of factor B, the rate-limiting step of the alternative pathway of complement activation. This protein also functions as an adipokine, a cell signaling protein secreted by adipocytes, which regulates insulin secretion in mice. Mutations in this gene underlie complement factor D deficiency, which is associated with recurrent bacterial meningitis infections in human patients. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate the mature protease. [provided by RefSeq, Nov 2015] |

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| **UniProt Comments for CFD** | CFD: Factor D 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. Defects in CFD are the cause of complement factor D deficiency (CFDD). CFDD is an immunologic disorder characterized by increased susceptibility to bacterial infections, particularly Neisseria infections, due to a defect in the alternative complement pathway. Belongs to the peptidase S1 family.<br><br>Protein type: Secreted, signal peptide; Secreted; Protease; EC 3.4.21.46<br><br>Chromosomal Location of Human Ortholog: 19p13.3<br><br>Cellular Component: extracellular region; extracellular space<br><br>Molecular Function: serine-type endopeptidase activity; serine-type peptidase activity<br><br>Biological Process: blood coagulation; complement activation; complement activation, alternative pathway; innate immune response; platelet activation; platelet degranulation; proteolysis<br><br>Disease: Complement Factor D Deficiency |
| **Research Articles on CFD** | **1.** Overall adipsin levels among male asbestos industry workers were significantly higher than among control subjects. |
| **Precautions** | All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines. |
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