

CFD Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12089a

Product Information

Application WB, IHC-P, E **Primary Accession** P00746

Other Accession <u>P51779</u>, <u>Q3T0A3</u>, <u>NP 001919.2</u>

Reactivity Human, Rat, Mouse

Predicted Bovine, Pig
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB19269
Calculated MW 27033
Antigen Region 68-99

Additional Information

Gene ID 1675

Other Names Complement factor D, Adipsin, C3 convertase activator, Properdin factor D,

CFD, DF, PFD

Target/Specificity This CFD antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 68-99 amino acids from the N-terminal

region of human CFD.

Dilution WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions CFD Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name CFD (HGNC:2771)

Synonyms DF, PFD

Function

Serine protease that initiates the alternative pathway of the complement system, a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:21205667, PubMed:22362762, PubMed:6769474, PubMed:874324, PubMed:9748277). In contrast to other complement pathways (classical, lectin and GZMK) that are directly activated by pathogens or antigen-antibody complexes, the alternative complement pathway is initiated by the spontaneous hydrolysis of complement C3 (PubMed:21205667, PubMed:22362762, PubMed:6769474, PubMed:874324). The alternative complement pathway acts as an amplification loop that enhances complement activation by mediating the formation of C3 and C5 convertases (PubMed:21205667, PubMed:22362762, PubMed:6769474, PubMed:874324). Activated CFD cleaves factor B (CFB) when the latter is complexed with complement C3b, activating the C3 convertase of the alternative pathway (PubMed:21205667, PubMed:6769474, PubMed:874324, PubMed:9748277).

Cellular Location

Secreted

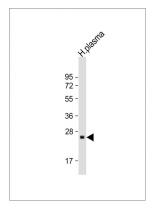
Background

The protein encoded by this gene is a member of the trypsin family of peptidases. The encoded protein is a component of the alternative complement pathway best known for its role in humoral suppression of infectious agents. This protein is also a serine protease that is secreted by adipocytes into the bloodstream. Finally, the encoded protein has a high level of expression in fat, suggesting a role for adipose tissue in immune system biology.

References

Bailey, S.D., et al. Diabetes Care (2010) In press: Hietaharju, A., et al. Eur. J. Neurol. 17(2):332-334(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Ciprandi, G., et al. Int. Immunopharmacol. 9(12):1460-1463(2009) Cerhan, J.R., et al. Br. J. Haematol. 145(5):614-623(2009)

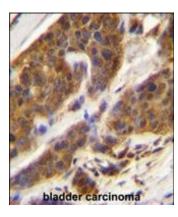
Images



Anti-CFD Antibody (N-term)at 1:2000 dilution + human plasma lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CFD Antibody (N-term) (Cat.

#AP12089a)immunohistochemistry analysis in formalin fixed and paraffin embedded human bladder carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CFD Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.