10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CFD Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12089a

Specification

CFD Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P00746
Other Accession	P51779, Q3T0A3, NP_001919.2
Reactivity	**Human**
Predicted	**Bovine, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**68-99**

CFD Antibody (N-term) - 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~~1:2000
IHC-P~~1:50~100
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.

CFD Antibody (N-term) - 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).

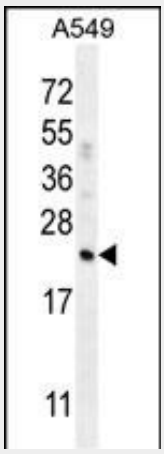
Cellular Location
Secreted

CFD Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

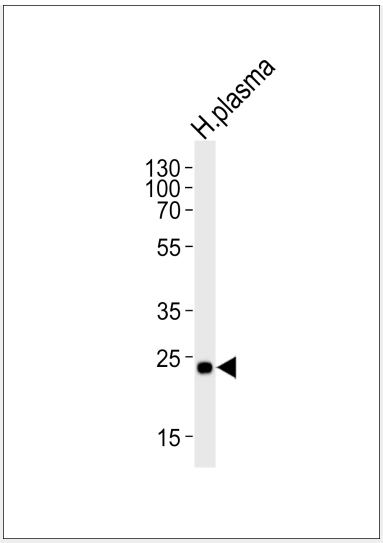
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CFD Antibody (N-term) - Images

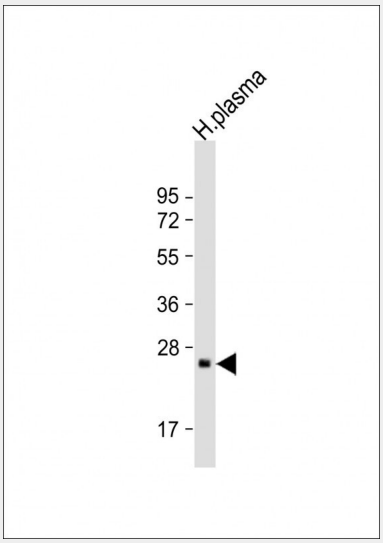


CFD Antibody (N-term) (Cat. #AP12089a) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the CFD antibody detected the CFD protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

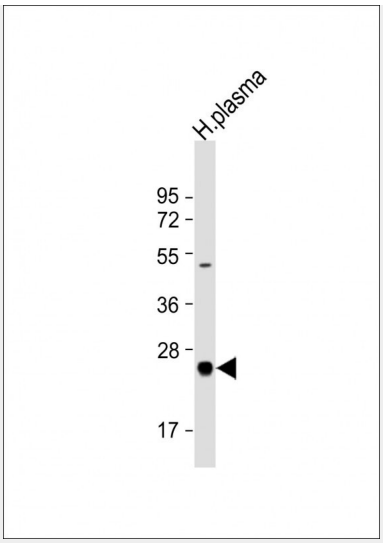


Western blot analysis of lysate from human plasma tissue lysate, using CFD Antibody (N-term)(Cat. #AP12089a). AP12089a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

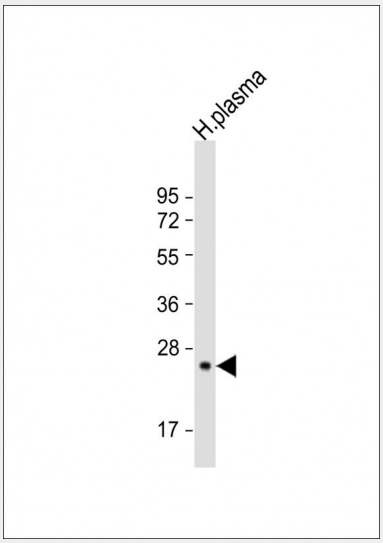


Anti-CFD Antibody (N-term)at 1:2000 dilution + human plasma lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

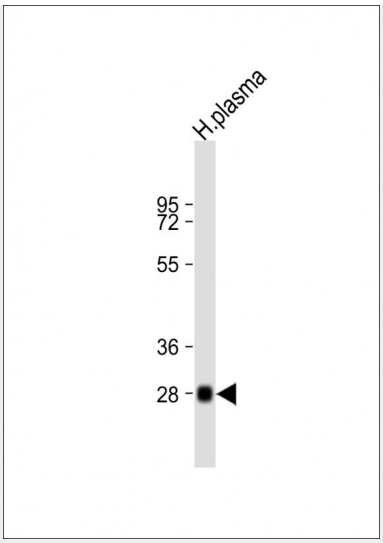


Anti-CFD Antibody (N-term)at 1:2000 dilution + human plasma lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

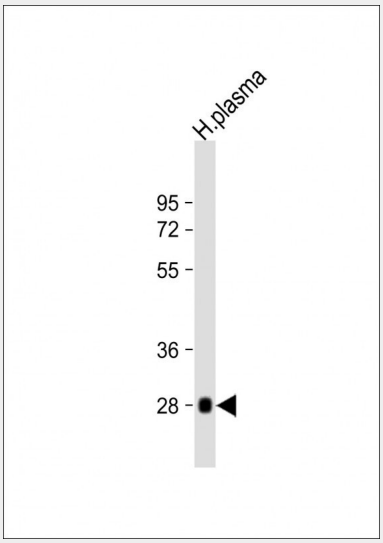


Anti-CFD Antibody (N-term)at 1:2000 dilution + human plasma lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

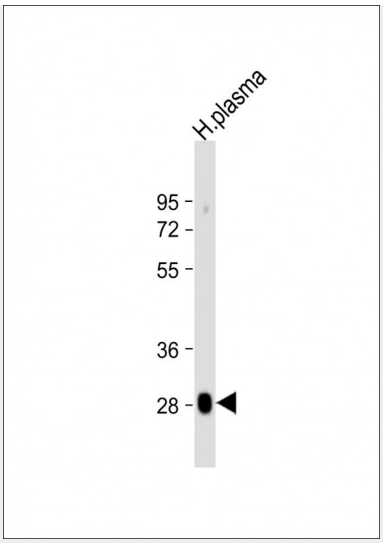


Anti-CFD Antibody (N-term) at 1:2000 dilution + human plasma lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

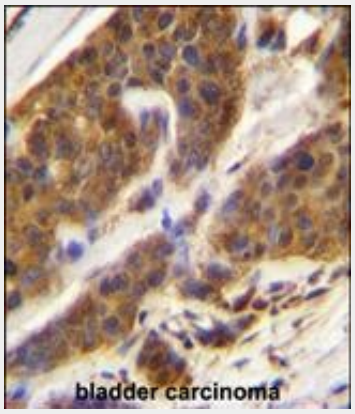


Anti-CFD Antibody (N-term) at 1:2000 dilution + human plasma lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-CFD Antibody (N-term) at 1:2000 dilution + human plasma lysate 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.

CFD Antibody (N-term) - 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.

CFD Antibody (N-term) - 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)