

Anti-Factor D Picoband Antibody

Catalog # ABO12926

Product Information

Application	WB, IHC-P, E
Primary Accession	P32038
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Factor D detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	54249
Other Names	Complement factor D, 3.4.21.46, Adipsin, C3 convertase activator, Endogenous vascular elastase, Properdin factor D, Cfd, Adn, Df
Calculated MW	28442
Application Details	Western blot, 0.1-0.5 μ g/ml Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml Direct ELISA, 0.1-0.5 μ g/ml
Subcellular Localization	Secreted.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived rat Factor D recombinant protein (Position: I26-A263).
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C; for one year. After r ° Constitution, at 4 °C; for one month. It ° Can also be aliquotted and stored frozen at -20 °C; for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	Cfd
Synonyms	Adn, Df
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. 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. The alternative complement pathway acts as an amplification loop that enhances complement activation by mediating the formation of C3 and C5 convertases. Activated CFD cleaves factor B (CFB) when the latter is complexed with complement C3b, activating the C3 convertase of the alternative pathway.
Cellular Location	Secreted.

Background

Factor D is a protein which in humans is encoded by the CFD gene. 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. It is also a serine protease that is secreted by adipocytes into the bloodstream. And it stimulates glucose transport for triglyceride accumulation in fats cells and inhibits lipolysis. Finally, the encoded protein has a high level of expression in fat, suggesting a role for adipose tissue in immune system biology.

Images

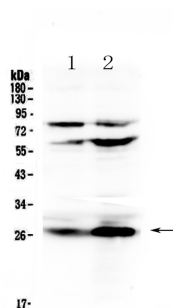
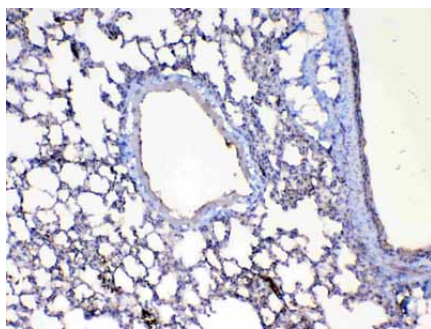


Figure 1. Western blot analysis of Factor D using anti-Factor D antibody (ABO12926). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat RH35 cell lysates, Lane 2: rat PC-12 cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Factor D antigen affinity purified polyclonal antibody (Catalog # ABO12926) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Factor D at approximately 27KD. The expected band size for Factor D is at 27KD.

Figure 2. IHC analysis of Factor D using anti-Factor D antibody (ABO12926). Factor D was detected in paraffin-embedded section of mouse lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit



anti-Factor D Antibody (ABO12926) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

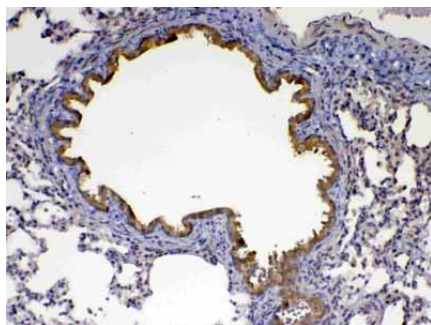


Figure 3. IHC analysis of Factor D using anti-Factor D antibody (ABO12926).Factor D was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti-Factor D Antibody (ABO12926) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

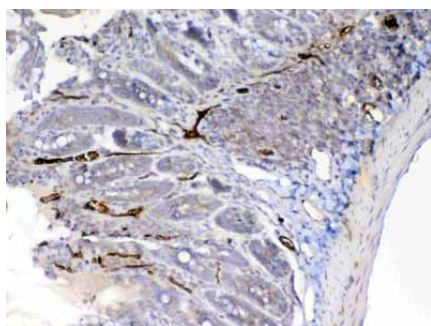


Figure 4. IHC analysis of Factor D using anti-Factor D antibody (ABO12926).Factor D was detected in paraffin-embedded section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti-Factor D Antibody (ABO12926) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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