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CFB Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9036c

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P00751
Reactivity	Human
Predicted	Mouse, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21500
Calculated MW	85533
Antigen Region	469-494

Additional Information

Gene ID	629
Other Names	Complement factor B, C3/C5 convertase, Glycine-rich beta glycoprotein, GBG, PBF2, Properdin factor B, Complement factor B Ba fragment, Complement factor B Bb fragment, CFB, BF, BFD
Target/Specificity	This CFB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 469-494 amino acids from the Central region of human CFB.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 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	CFB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CFB (HGNC:1037)
Synonyms	BF, BFD

Function	Precursor of the catalytic component of the C3 and C5 convertase complexes of 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:3638964, PubMed:624565, PubMed:6554279, PubMed:6919543, PubMed:9748277). The alternative complement pathway acts as an amplification loop that enhances other complement pathways (classical, lectin and GZMK) by promoting formation of additional C3 and C5 convertases (PubMed:3638964, PubMed:624565, PubMed:6554279, PubMed:6919543, PubMed:9748277). CFB is cleaved and activated by CFD to generate Ba and Bb chains; Bb chain constituting the catalytic component of the C3 and C5 convertases (PubMed:6769474, PubMed:9748277).
Cellular Location	Secreted.

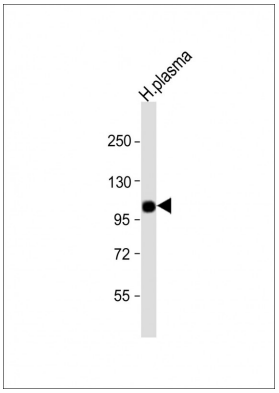
Background

CFB encodes complement factor B, a component of the alternative pathway of complement activation. Factor B circulates in the blood as a single chain polypeptide. Upon activation of the alternative pathway, it is cleaved by complement factor D yielding the noncatalytic chain Ba and the catalytic subunit Bb. The active subunit Bb is a serine protease which associates with C3b to form the alternative pathway C3 convertase. Bb is involved in the proliferation of preactivated B lymphocytes, while Ba inhibits their proliferation.

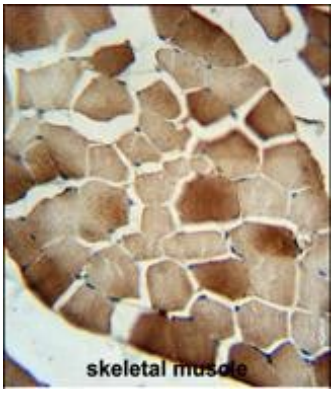
References

Munch,I.C., et.al., Invest. Ophthalmol. Vis. Sci. (2009) In press.
Gateva,V., et.al., Nat. Genet. 41 (11), 1228-1233 (2009).

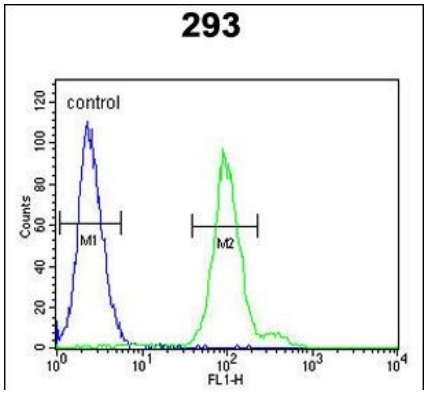
Images



Anti-CFB Antibody (Center) at 1:1000 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 : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



CFB Antibody (Center) (Cat. #AP9036c) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CFB Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



CFB Antibody (Center) (Cat. #AP9036c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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