

C4B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13985c

Product Information

Application	WB, E
Primary Accession	P0COL4
Other Accession	P0COL5 , NP_001002029.3
Reactivity	Human
Predicted	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33642
Calculated MW	192785
Antigen Region	655-684

Additional Information

Gene ID	720;721
Other Names	Complement C4-A, Acidic complement C4, C3 and PZP-like alpha-2-macroglobulin domain-containing protein 2, Complement C4 beta chain, Complement C4-A alpha chain, C4a anaphylatoxin, C4b-A, C4d-A, Complement C4 gamma chain, C4A, CO4, CPAMD2
Target/Specificity	This C4B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 655-684 amino acids from the Central region of human C4B.
Dilution	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	C4B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	C4A {ECO:0000303 PubMed:6546707, ECO:0000312 HGNC:HGNC:1323}
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Function	Precursor of non-enzymatic components of the classical, lectin and GZMK complement pathways, which consist in a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system.
Cellular Location	Secreted. Synapse Cell projection, axon. Cell projection, dendrite [Complement C4b-A]: Secreted. Cell surface. Note=Covalently associated with the surface of pathogens: the internal thioester bond reacts with carbohydrate antigens on the target surface to form amide or ester bonds.
Tissue Location	Complement component C4 is expressed at highest levels in the liver, at moderate levels in the adrenal cortex, adrenal medulla, thyroid gland, and the kidney, and at lowest levels in the heart, ovary, small intestine, thymus, pancreas and spleen (PubMed:11367523). The extra-hepatic sites of expression may be important for the local protection and inflammatory response (PubMed:11367523).

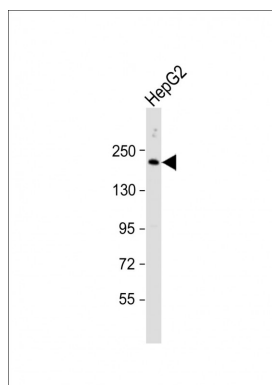
Background

This gene encodes the basic form of complement factor 4, part of the classical activation pathway. The protein is expressed as a single chain precursor which is proteolytically cleaved into a trimer of alpha, beta, and gamma chains prior to secretion. The trimer provides a surface for interaction between the antigen-antibody complex and other complement components. The alpha chain may be cleaved to release C4 anaphylatoxin, a mediator of local inflammation. Deficiency of this protein is associated with systemic lupus erythematosus. This gene localizes to the major histocompatibility complex (MHC) class III region on chromosome 6. Varying haplotypes of this gene cluster exist, such that individuals may have 1, 2, or 3 copies of this gene. In addition, this gene exists as a long form and a short form due to the presence or absence of a 6.4 kb endogenous HERV-K retrovirus in intron 9.

References

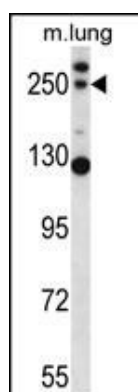
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Images



Anti-C4 Antibody (Center) at 1:2000 dilution + HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 193 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

C4B Antibody (Center) (Cat. #AP13985c) western blot analysis in mouse lung tissue lysates (35ug/lane). This demonstrates the C4B antibody detected the C4B protein (arrow).



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