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C2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10662a

Product Information

Application	WB, E
Primary Accession	P06681
Other Accession	NP_000054
Reactivity	Human, Hamster
Predicted	Bovine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18356
Calculated MW	83268
Antigen Region	147-176

Additional Information

Gene ID	717
Other Names	Complement C2, C3/C5 convertase, Complement C2b fragment, Complement C2a fragment, C2
Target/Specificity	This C2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 147-176 amino acids from the N-terminal region of human C2.
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	C2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	C2 {ECO:0000303|PubMed:2949737, ECO:0000312|HGNC:HGNC:1248}
Function	Precursor of the catalytic component of the C3 and C5 convertase complexes, which are part of the complement pathway, a cascade of proteins

	that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:12878586, PubMed:17027507, PubMed:18204047, PubMed:39914456, PubMed:39814882). Component C2 is part of the classical, lectin and GZMK complement systems (PubMed:12878586, PubMed:17027507, PubMed:18204047, PubMed:22691502, PubMed:39914456).
Cellular Location	Secreted. Cell surface. Note=Recruited to the surface of pathogens by complement C3b and complement C4b opsonins

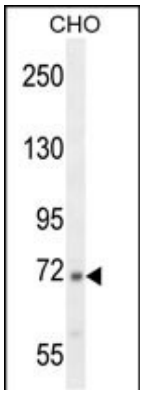
Background

Component C2 is a serum glycoprotein that functions as part of the classical pathway of the complement system. Activated C1 cleaves C2 into C2a and C2b. The serine proteinase C2a then combines with complement factor 4b to create the C3 or C5 convertase. Deficiency of C2 has been reported to associated with certain autoimmune diseases and SNPs in this gene have been associated with altered susceptibility to age-related macular degeneration. This gene localizes within the class III region of the MHC on the short arm of chromosome 6. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described in publications but their full-length sequence has not been determined.

References

Hu, M., et al. Pharmacogenet. Genomics 20(10):634-637(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Liu, X., et al. Retina (Philadelphia, Pa.) 30(8):1177-1184(2010)
Han, S., et al. Hum. Immunol. 71(7):727-730(2010)
Ishii, Y., et al. J. Immunol. 151(1):170-174(1993)

Images



C2 Antibody (N-term) (Cat. #AP10662a) western blot analysis in CHO cell line lysates (35ug/lane).This demonstrates the C2 antibody detected the C2 protein (arrow).

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