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C7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9262c

Specification

C7 Antibody (Center) - Product Information

Application	**WB, FC, IHC-P,E**
Primary Accession	P10643
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**93518**
Antigen Region	**375-403**

C7 Antibody (Center) - Additional Information

Gene ID 730

Other Names
Complement component C7, C7

Target/Specificity
This C7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 375-403 amino acids from the Central region of human C7.

Dilution
WB~~1:1000
FC~~1:10~50
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
C7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

C7 Antibody (Center) - Protein Information

Name C7 {ECO:0000303|PubMed:3335508, ECO:0000312|HGNC:HGNC:1346}

Function Component of the membrane attack complex (MAC), a multiprotein complex activated by the complement cascade, which inserts into a target cell membrane and forms a pore, leading to target cell membrane rupture and cell lysis (PubMed:22832194, PubMed:26841837, PubMed:27052168, PubMed:30552328, PubMed:3335508). The MAC is initiated by proteolytic cleavage of C5 into complement C5b in response to the classical, alternative, lectin and GZMK complement pathways (PubMed:22832194, PubMed:30552328, PubMed:3335508). The complement pathways consist in a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:22832194, PubMed:30552328, PubMed:3335508). C7 serves as a membrane anchor (PubMed:30552328). During MAC assembly, associates with C5b and C6 to form the C5b-7 complex, a key lipophilic precursor of the MAC complex, which associates with the outer leaflet and reduces the energy for membrane bending (PubMed:30552328, PubMed:32569291).

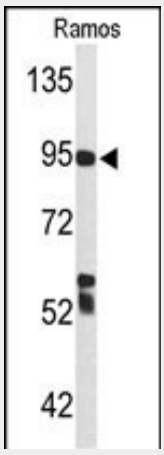
Cellular Location
Secreted. Target cell membrane Note=Secreted as soluble protein (PubMed:3335508). Inserts into the cell membrane of target cells (PubMed:30552328, PubMed:31061395)

C7 Antibody (Center) - 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

C7 Antibody (Center) - Images



Western blot analysis of C7 Antibody (Center) (Cat. #AP9262c) in Ramos cell line lysates (35ug/lane). C7 (arrow) was detected using the purified Pab.

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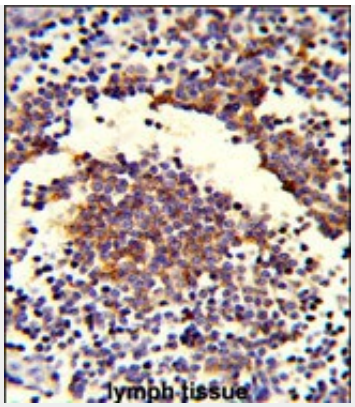
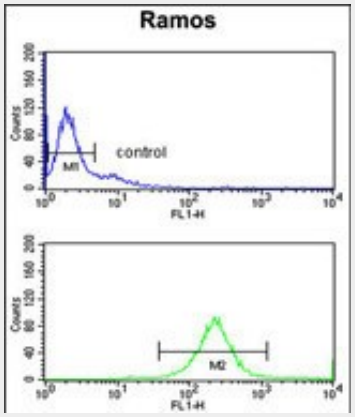


Formalin-fixed and paraffin-embedded human lymph tissue reacted with C7 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



C7 Antibody (Center) (Cat. #AP9262c) flow cytometry analysis of Ramos cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

C7 Antibody (Center) - Background

C7 is a component of the complement system. It participates in the formation of Membrane Attack Complex (MAC). People with C7 deficiency are prone to bacterial infection.

C7 Antibody (Center) - References

Davila,S., et.al., Genes Immun. 11 (3), 232-238 (2010)
Kuijpers,T.W., et.al., Mol. Immunol. 47 (4), 671-677 (2010)
Wheeler,H.E., et.al., PLoS Genet. 5 (10), E1000685 (2009)