10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

C7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9262c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P10643
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22516
Calculated MW	93518
Antigen Region	375-403

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~~1:500 IHC-P~~1:100~500 FC~~1:10~50 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.

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)

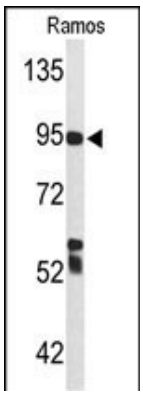
Background

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.

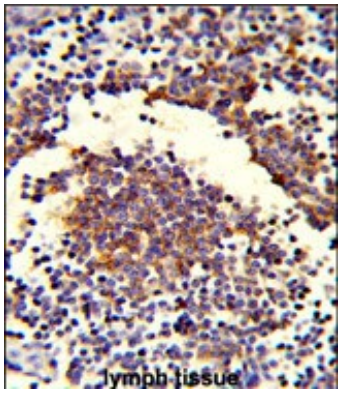
References

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)

Images

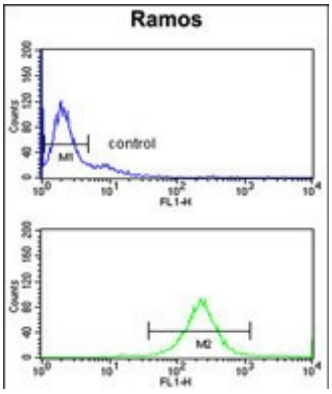


Western blot analysis of C7 Antibody (Center) (Cat. #AP9262c) in Ramos cell line lysates (35ug/lane). C7 (arrow) was detected using the purified Pab.



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.