

#### C7 Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP9262c

## Specification

# C7 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>P10643</u>

# C7 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 730

**Other Names** Complement component C7, C7

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP9262c>AP9262c</a> was selected from the Center region of human C7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# C7 Antibody (Center) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/22832194" target="\_blank">22832194</a>, PubMed:<a href="http://www.uniprot.org/citations/26841837" target="\_blank">26841837</a>, PubMed:<a href="http://www.uniprot.org/citations/27052168" target="\_blank">27052168</a>, PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/3335508" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/3335508" target="\_blank">3335508</a>). The MAC is initiated by proteolytic cleavage of C5 into complement C5b in response to the classical, alternative, lectin and GZMK complement pathways (PubMed:<a

href="http://www.uniprot.org/citations/22832194" target="\_blank">22832194</a>, PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a



href="http://www.uniprot.org/citations/3335508" target="\_blank">3335508</a>). 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:<a href="http://www.uniprot.org/citations/22832194" target="\_blank">22832194</a>, PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/3335508" target="\_blank">3335508</a>). C7 serves as a membrane anchor (PubMed:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>). 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:<a href="http://www.uniprot.org/citations/30552328" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/32569291" target="\_blank">30552328</a>, PubMed:<a href="http://www.uniprot.org/citations/32569291" target="\_blank">30552328</a>, PubMed:<a

#### **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) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Blocking Peptides</u>
- C7 Antibody (Center) Blocking Peptide Images

### C7 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)