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# C9 Antibody

Rabbit mAb
Catalog # AP90228

## Product Information

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| **Application** | WB, IHC, IP |
| **Primary Accession** | P02748 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Other Names** | Complement component C9; Comple Complement component C9bment component C9a; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 63173 |

## Additional Information

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| **Dilution** | WB 1:500~1:2000 IHC 1:50~1:200 IP 1:50 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human C9 |
| **Description** | C9 is synthesised in the liver and monocytes, and is a plasma protein consisting of a single polypeptide chain of molecular weight 71kDa. Normal plasma concentration is 60mg/L. C9 forms part of the membrane attack complex (MAC) the cytolytic terminal complex of the complement pathways. C9 binds to the membrane associated C5b-8, binding of C9 to C5b-8 leads to the circular polymerisation of 12-18 C9 molecules. This is the basis of the hydrophilic, protein-walled, trans-membrane channel formed by the MAC, which leads to cell lysis and destruction. |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

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| **Name** | C9 {ECO:0000303\|PubMed:4018030, ECO:0000312\|HGNC:HGNC:1358} |
| **Function** | Pore-forming 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:26841934, PubMed:27052168, PubMed:30552328, PubMed:6177822, PubMed:9212048, PubMed:9634479). The MAC is initiated by proteolytic cleavage of C5 into complement C5b in response to the classical, alternative, lectin and GZMK complement pathways (PubMed:39914456, PubMed:39814882, PubMed:9212048, PubMed:9634479). The complement pathways consist in a cascade of proteins that leads to phagocytosis and |

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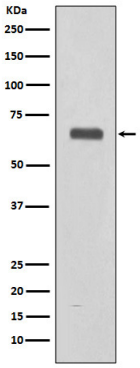
| | breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:9212048, PubMed:9634479). Constitutes the pore- forming subunit of the MAC complex: during MAC assembly, C9 associates with the C5b8 intermediate complex, and polymerizes to complete the pore (PubMed:26841934, PubMed:30111885, PubMed:30552328, PubMed:34752492, PubMed:4055801, PubMed:6177822). |
| **Cellular Location** | Secreted. Target cell membrane; Multi-pass membrane protein. Note=Secreted as soluble monomer (PubMed:26841934, PubMed:30111885, PubMed:4055801, PubMed:9634479) Oligomerizes at target membranes, forming a pre-pore (PubMed:26841934, PubMed:30111885, PubMed:31061395, PubMed:4055801, PubMed:9634479). A conformation change then leads to the formation of a 100 Angstrom diameter pore (PubMed:26841934, PubMed:30111885, PubMed:31061395, PubMed:4055801, PubMed:9634479). |
| **Tissue Location** | Plasma (at protein level). |

## Images




Western blot analysis of C9 expression in Human fetal liver lysate.

Image not found : 202311/AP90228-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human kidney, using C9 Antibody.

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