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

# Anti-Complement C9 Picoband Antibody

Catalog # ABO12913

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | P02748 |
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse |
| **Clonality** | Polyclonal |
| **Format** | Lyophilized |
| **Description** | Rabbit IgG polyclonal antibody for Complement C9 detection. Tested with WB, Direct ELISA in Human;Mouse. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 735 |
| **Other Names** | Complement component C9, Complement component C9a, Complement component C9b, C9 |
| **Calculated MW** | 63173 |
| **Application Details** | Western blot, 0.1-0.5 □g/ml<br>Direct ELISA, 0.1-0.5 □g/ml |
| **Subcellular Localization** | Secreted. Cell membrane; Multi-pass membrane protein. Secreted as soluble monomer. Oligomerizes at target membranes, forming a pre-pore. A conformation change then leads to the formation of a 100 Angstrom diameter pore. |
| **Tissue Specificity** | Plasma. |
| **Source** | Eukaryota |
| **Contents** | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg $Na_2HPO_4$, 0.05mg $NaN_3$. |
| **Immunogen** | E. coli-derived human Complement C9 recombinant protein (Position: K289-N515). |
| **Cross Reactivity** | No cross reactivity with other proteins. |
| **Storage** | At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing. |

## Protein Information

| | |
|---|---|
| **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 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). |

## Background

Complement component 9 is a protein involved in the complement system. It participates in the formation of the Membrane Attack Complex (MAC). The MAC assembles on bacterial membranes to form a pore, permitting disruption of bacterial membrane organization. Mutations in this gene cause component C9 deficiency. And this gene is mapped to 5p13.1.

## Images

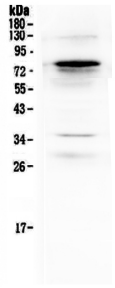



Figure 1. Western blot analysis of Complement C9 using anti-Complement C9 antibody (ABO12913).

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