

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 μ g/ml Direct ELISA, 0.1-0.5 μ 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 ₂ HPO 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

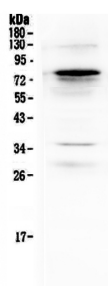


Figure 1. Western blot analysis of Complement C9 using anti-Complement C9 antibody (ABO12913).