

Complement C9 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51027

Product Information

Application	WB, IHC-P
Primary Accession	<u>P02748</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63173

Additional Information

Gene ID	735
Other Names	Complement component C9, Complement component C9a, Complement component C9b, C9
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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: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 LocationPlasma (at protein level).

Background

Constituent of the membrane attack complex (MAC) that plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. C9 is the pore-forming subunit of the MAC.

References

Stanley K.K., et al.EMBO J. 4:375-382(1985). Discipio R.G., et al.Proc. Natl. Acad. Sci. U.S.A. 81:7298-7302(1984). Marazziti D., et al.Biochemistry 27:6529-6534(1988). Witzel-Schloemp K., et al.Immunogenetics 48:144-147(1998). DiScipio R.G., et al.J. Biol. Chem. 260:14802-14809(1985).

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