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C6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6937a

Product Information

Application	IHC-P, FC, IF, WB, E
Primary Accession	P13671
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21849
Calculated MW	104786
Antigen Region	30-58

Additional Information

Gene ID	729
Other Names	Complement component C6, C6
Target/Specificity	This C6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-58 amino acids from the N-terminal region of human C6.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	C6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	C6 {ECO:0000303|PubMed:2789218, ECO:0000312|HGNC:HGNC:1339}
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:22267737, PubMed:22832194, PubMed:26841837,

PubMed:27052168, PubMed:30552328). The MAC is initiated by proteolytic cleavage of C5 into complement C5b in response to the classical, alternative, lectin and GZMK complement pathways (PubMed:30552328). 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:30552328). Together with component C5b, involved in MAC complex assembly: complement C5b and C6 associate with the outer leaflet of target cell membrane, reducing the energy for membrane bending (PubMed:30552328, PubMed:32569291).

Cellular Location

Secreted. Target cell membrane; Multi-pass membrane protein. Note=Secreted as soluble protein (PubMed:2808363). Inserts into the cell membrane of target cells (PubMed:30552328, PubMed:31061395)

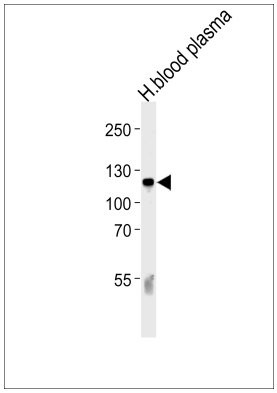
Background

C6 is a component of complement cascade. It is part of the membrane attack complex which can insert into the cell membrane and cause cell to lyse. People with C6 deficiency are prone to bacterial infection.

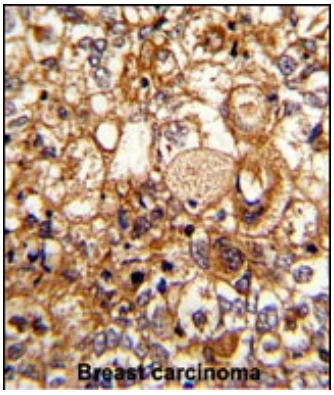
References

Wu,C., et.al., Proteomics 7 (11), 1775-1785 (2007)

Images

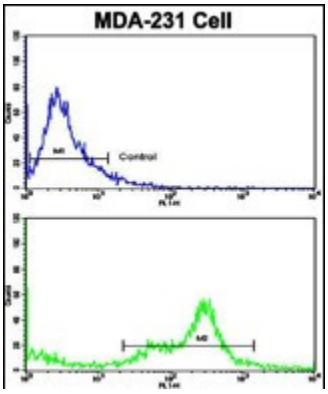


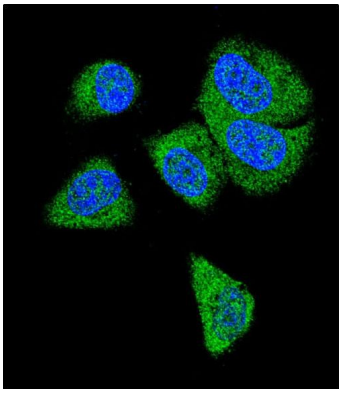
Western blot analysis of lysate from human blood plasma tissue lysate, using C6 Antibody (N-term)(Cat. #AP6937a). AP6937a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with C6 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Flow cytometric analysis of MDA-231 cells using C6 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.





Confocal immunofluorescent analysis of C6 Antibody (N-term)(Cat#AP6937a) with MDA-MB231 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

Citations

- Interaction between Multimeric von Willebrand Factor and Complement: A Fresh Look to the Pathophysiology of Microvascular Thrombosis.