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

C5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8577a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P01031
Reactivity	Human
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21866
Calculated MW	188305
Antigen Region	253-281

Additional Information

Gene ID	727
Other Names	Complement C5, C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4, Complement C5 beta chain, Complement C5 alpha chain, C5a anaphylatoxin, Complement C5 alpha' chain, C5, CPAMD4
Target/Specificity	This C5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-281 amino acids of human C5.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	C5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	C5 {ECO:0000303|PubMed:1984448, ECO:0000312|HGNC:HGNC:1331}
Function	Precursor of the C5a anaphylatoxin and complement C5b components of the complement pathways, which consist in a cascade of proteins that leads

to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:12878586, PubMed:18204047, PubMed:30643019, PubMed:6554279). Activated downstream of classical, alternative, lectin and GZMK complement pathways (PubMed:12878586, PubMed:18204047, PubMed:30643019, PubMed:39914456, PubMed:39814882, PubMed:6554279).

Cellular Location Secreted. [C5a anaphylatoxin]: Secreted

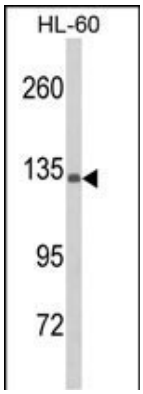
Background

C5 is the fifth component of complement, which plays an important role in inflammatory and cell killing processes. This protein is comprised of alpha and beta polypeptide chains that are linked by a disulfide bridge. An activation peptide, C5a, which is an anaphylatoxin that possesses potent spasmogenic and chemotactic activity, is derived from the alpha polypeptide via cleavage with a convertase. The C5b macromolecular cleavage product can form a complex with the C6 complement component, and this complex is the basis for formation of the membrane attack complex, which includes additional complement components.

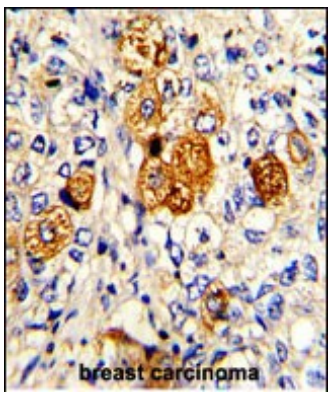
References

McClure,A., et.al., Rheumatology (Oxford) 48 (11), 1369-1374 (2009)
DiScipio,R.G.et.al., J. Biol. Chem. 267 (24), 17087-17094 (1992)

Images

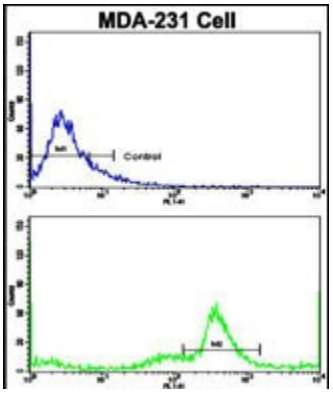


Western blot analysis of C5 Antibody (N-term) (Cat. #AP8577a) in HL-60 cell line lysates (35ug/lane). C5 (arrow) was detected using the purified Pab.(2ug/ml)



Formalin-fixed and paraffin-embedded human breast carcinoma with C5 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 C5 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.



Citations

- SAK-HV Triggered a Short-period Lipid-lowering Biotherapy Based on the Energy Model of Liver Proliferation via a Novel Pathway.

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