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C5a anaphylatoxin Rabbit pAb

Catalog # AP99909

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P01031
Other Accession	P01031
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	188305
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human C5a anaphylatoxin
Epitope Specificity	701-751/1676
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 anaphylatoxin-like domain. Contains 1 NTR domain.
SUBUNIT	C5 precursor is first processed by the removal of 4 basic residues, forming two chains, beta and alpha, linked by a disulfide bond. C5 convertase activates C5 by cleaving the alpha chain, releasing C5a anaphylatoxin and generating C5b (beta chain + alpha' chain). Interacts with tick complement inhibitor.
DISEASE	Defects in C5 are the cause of complement component 5 deficiency (C5D) [MIM:609536]. A rare defect of the complement classical pathway associated with susceptibility to severe recurrent infections, predominantly by Neisseria gonorrhoeae or Neisseria meningitidis. Note=An association study of C5 haplotypes and genotypes in individuals with chronic hepatitis C virus infection shows that individuals homozygous for the C5_1 haplotype have a significantly higher stage of liver fibrosis than individuals carrying at least 1 other allele (PubMed:15995705).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Activation of the complement system plays a key role in normal inflammatory response to injury but may cause substantial injury when activated inappropriately. The complement system is activated either through the classical (antibody induced) or the alternative (microbial surface, polysacharride induced) pathway, both leading to the formation of the C5b9 complex. Fluid phase binding of the multifunctional glycoprotein S protein (vitronectin) to C5b9 leads to the formation of a cytolytically inactive complex, SC5b9, which is unable to attach to cells.

Additional Information

Gene ID	727
Other Names	C5D; C5a; C5b; CPAMD4; ECLZB; ARMD15; C9D; CO5_HUMAN; C5; C3 and

	PZP-like alpha-2-macroglobulin domain-containing protein 4; CO9_HUMAN; C9; CO8A_HUMAN; C8A; Complement component 8 subunit alpha; CO7_HUMAN; C7; CO6_HUMAN; C6; complement C5; complement component 5; prepro-C5; C5a anaphylatoxin
Dilution	IF=1:100-500,Flow-Cyt=2ug/Test,IHC-P=1:100-500,IHC-F=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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