



Rabbit Anti-C5 antibody

SL15197R

Product Name:	C5
Chinese Name:	补体C5抗体
Alias:	Anaphylatoxin C5a analog; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4; C5; C5a; CO5_HUMAN; Complement C5 alpha" chain; Complement C5; Complement component C5; CPAMD4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	104/112kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human C5 :951-1100/1676
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	The complement component proteins: C2, C3, C4 and C5 are potent anaphyl-atoxins that are released during complement activation. Binding of these proteins to their respective G protein-coupled receptors, C3aR, C1R and C5aR, induces proinflammatory events, such as cellular degranulation, smooth muscle contraction, arachidonic acid metabolism, cytokine release, leukocyte activation and cellular

chemotaxis. Activation of the complement system leads to the formation of C5b-9 terminal complex, and while C5b-9 can promote cell lysis, the sublytic assembly of C5b-9 on plasma membranes causes an opposite result and induces cell cycle activation and survival. C5b-9 can rescue oligodendrocytes from FAS-mediated apoptosis by regulating caspase-8 processing via PI 3-K signaling. C5b-9 may play a pro-inflammatory role in the acute phase of multiple sclerosis, but may also be neuroprotective during the chronic phase of the disease. Complement C5 precursor contains C5a anaphylatoxin. C3a and C5a secretion correlates with pathophysiological phenotypes such as asthma and bacterial meningitis.

Function:

Activation of C5 by a C5 convertase initiates the spontaneous assembly of the late complement components, C5-C9, into the membrane attack complex. C5b has a transient binding site for C6. The C5b-C6 complex is the foundation upon which the lytic complex is assembled. Derived from proteolytic degradation of complement C5, C5 anaphylatoxin is a mediator of local inflammatory process. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. C5a also stimulates the locomotion of polymorphonuclear leukocytes (chemokinesis) and direct their migration toward sites of inflammation (chemotaxis).

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.

Subcellular Location:

Secreted.

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).

Similarity:

Contains 1 anaphylatoxin-like domain. Contains 1 NTR domain.

SWISS:

P01031

Gene ID:

727

Database links:

[Entrez Gene: 727](#)Human

[Entrez Gene: 15139](#)Mouse

[Omim: 120900](#)Human

[SwissProt: P01031](#)Human

[SwissProt: P06684](#)Mouse

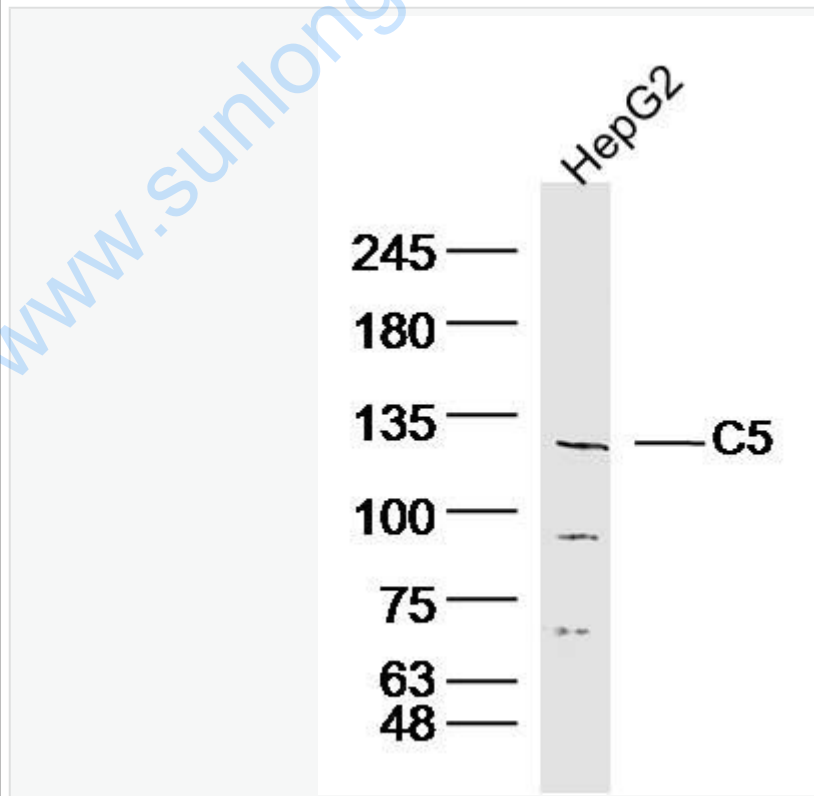
[Unigene: 494997](#)Human

[Unigene: 2168](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample: HepG2 (human) Lysate at 40 ug

Primary: Anti- C5 (SL15197R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 104/112kD

Observed band size: 117kD

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