



Mouse Anti-Human C5a monoclonal antibody, clone NN19 (CABT-ZB726)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	It reacts with Human C5
Target	C5
Immunogen	Recombinant Human C5a Protein
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	NN19
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB726 - CABT-ZB1046 This antibody will detect C5a in antibody pair set. [ABPR-ZB306]
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human C5a. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	Purified, Liquid
Concentration	Lot specific

Size	50 μ L, 100 μ L, 200 μ L, 1 mL
Buffer	PBS
Preservative	None
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	C5a is a protein fragment released from complement component C5. This 74 amino acid peptide in humans is generated by the cleavage of C5a convertase on the C5 α -chain during the classical, alternative, and lectin pathways of complement activation. The structure of C5a includes a core region consisting of four, anti-parallel alpha-helices held together by three disulfide linkages and a structured C-terminal tail, and C5a is rapidly metabolised by carboxypeptidase B to a 73 amino acid low activity form, C5a des-Arg. C5a is an extremely potent proinflammatory mediator, as well as a potent chemotactic factor for neutrophils and other leukocytes. It causes histamine release, increases in vascular permeability, induces several cytokines production from leukocytes, enhances neutrophil-endothelial cell adhesion, and augments the humoral and cell-mediated immune response. C5a is quickly metabolised by carboxypeptidases, forming the less potent C5adesArg. Acting via a classical G protein-coupled receptor, CD88, C5a and C5adesArg exert a number of effects essential to the innate immune response, while their actions at the more recently discovered non-G protein-coupled receptor, C5L2 (or GPR77), remain unclear. The widespread expression of C5a receptors throughout the body allows C5a to elicit a broad range of effects. Thus, C5a has been found to be a significant pathogenic driver in a number of immuno-inflammatory diseases, making C5a inhibition an attractive therapeutic strategy. C5a is a strong chemoattractant and is involved in the recruitment of inflammatory cells such as neutrophils, eosinophils, monocytes, and T lymphocytes, in activation of phagocytic cells and release of granule-based enzymes and generation of oxidants, all of which may contribute to innate immune functions or tissue damage. Accordingly, the anaphylatoxin C5a is implicated in a variety of diseases such as rheumatoid arthritis, systemic lupus erythematosus, reperfusion injury, Alzheimer's disease, and sepsis.
Keywords	C5; complement component 5; C5D; C5a

GENE INFORMATION

Synonyms	C5; complement component 5; C5D; C5a; C5b; ECLZB; CPAMD4; complement C5; prepro-C5; C5a anaphylatoxin; anaphylatoxin C5a analog; C3 and PZP-like alpha-2-macroglobulin domain-
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containing protein 4

Entrez Gene ID [727](#)

UniProt ID [P41229](#)
