



Anti-C5 monoclonal antibody, clone 046-10.2.2 (10-04) (CABT-47920MH)

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

PRODUCT INFORMATION

Product Overview

This product recognises secreted complement component 5 (C5), a 190kDa serine protease present in blood serum. It is composed of an 115kDa disulphide linked alpha-chain and a 75 kDa beta-chain. In addition to its role in complement, C5 is thought to be associated with inflammation, stimulating tumour necrosis factor alpha, interferon gamma mediated suppression of IL10 and IL12 production. C5 is activated via either the classical or the alternative complement pathway, by proteolytic cleavage of C5a from the N-terminal of the alpha-chain, by C5 convertase. C5a is an anaphylotoxin which mediates local inflammation. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. It also stimulates chemotaxis of neutrophils, eosinophils, basophils and monocytes towards the site of inflammation. The remaining fragment, C5b, initiates the assembly of the membrane attack complex. In haemolysis inhibition studies it was found that will block C5 haemolytic activity. Removal of sodium azide is recommended prior to use in functional assays.

Specificity	C5
Immunogen	Purified human C5
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	046-10.2.2 (10-04)
Conjugate	Unconjugated
Applications	ELISA; FA; WB

Format	Purified IgG - liquid
Size	100 µg
Preservative	0.1% Sodium Azide
Storage	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	C5 complement component 5 [Homo sapiens (human)]
Official Symbol	C5
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-containing protein 4;
Entrez Gene ID	727
Protein Refseq	NP_001726
UniProt ID	P01031
Chromosome Location	9q33-q34
Pathway	Activation of C3 and C5; Class A/1 (Rhodopsin-like receptors); Complement Activation, Classical Pathway; Complement and coagulation cascades; Complement cascade; Defective ACTH causes Obesity and Pro-opiomelanocortinin deficiency (POMCD); Disease; G alpha (i) signalling events;
Function	C5a anaphylatoxin chemotactic receptor binding; chemokine activity; endopeptidase inhibitor activity; protein binding; receptor binding;