



# Anti-C5a monoclonal antibody, clone 306000 [Biotin] (DCABY-4277)

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

## PRODUCT INFORMATION

<b>Antigen Description</b>	Human complement component C5a (C5a) is an enzymatically generated glycoprotein that belongs to a family of structurally and functionally related proteins known as anaphylatoxins. C5a is a 74 amino acid (aa) peptide that is created by the activity of C5a convertase on the C5 alpha-chain. Human C5a has four alpha-helices plus three intrachain disulfide bonds that create a triple loop structure. In serum, proteolytic processing removes the C-terminal arginine, creating a low activity C5a desArg74 molecule. Human C5a is 60% and 54% aa identical to mouse and rat C5a, respectively. C5a binds to a signaling G-protein coupled receptor (C5aR/CD88) and a non-signaling GPCR termed C5L2. Activation of CD88 results in neutrophil chemotaxis and endothelial cell activation. It also triggers an oxidative burst in macrophages and neutrophils, and induces release of histamine in basophils and mast cells.
<b>Specificity</b>	Detects human Complement Component C5/C5a in ELISAs. In sandwich immunoassays, detects human Complement Component C5a by itself or in the context of Complement Component C5. In ELISAs, this antibody does not cross-react with recombinant human (rh) Complement Component C3a, rh alpha 2-macroglobulin, recombinant mouse (rm) Complement Component C5a, or rmComplement Component C5d.
<b>Immunogen</b>	E. coli-derived recombinant human Complement Component C5a. Thr678-Arg751 Accession Number P01031
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	306000
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant

<b>Conjugate</b>	Biotin
<b>Applications</b>	ELISA Detection (Matched Pair)
<b>Format</b>	Liquid
<b>Size</b>	250 µg
<b>Buffer</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
<b>Preservative</b>	None
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">C5 complement component 5 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	C5
<b>Synonyms</b>	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;
<b>Entrez Gene ID</b>	<a href="#">727</a>
<b>Protein Refseq</b>	<a href="#">NP_001726</a>
<b>UniProt ID</b>	<a href="#">P01031</a>
<b>Chromosome Location</b>	9q33-q34
<b>Pathway</b>	Activation of C3 and C5; Class A/1 (Rhodopsin-like receptors); Complement Activation, Classical Pathway; Complement and coagulation cascades; Complement cascade; G alpha (i) signalling events; GPCR downstream signaling; GPCR ligand binding;
<b>Function</b>	C5a anaphylatoxin chemotactic receptor binding; chemokine activity; endopeptidase inhibitor activity; protein binding; receptor binding;