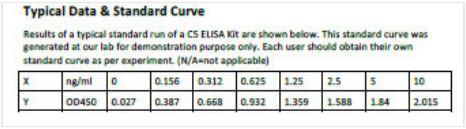
Complement C5 (C5) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	Complement C5, ELISA Kit
Full Product Name	Mouse Complement C5 ELISA Kit
Product Gene Name	C5 elisa kit
Product Synonym Names	C5
Species Reactivity	Mouse
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.156-10ng/ml
Sensitivity	0.094ng/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of C5. No significant crossreactivity or interference between C5 and analogues was observed.
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level C5 were tested on 3 different plates, 8 replicates in each plate. CV (%) = SD/meanX100. Inter-Assay: CV<10%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level C5 were tested 20 times on one plate, respectively. Intra-Assay: CV<8%
Molecular Weight	188,305 Da
OMIM	120900
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for C5 elisa kit	Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti- C5 antibody was pre-coated onto 96-well plates. And the biotin conjugated anti- C5 antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the C5 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of C5 can be calculated.
Other Notes	Small volumes of C5 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for C5 purchase	MBS763175 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Complement C5, ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing C5. The ELISA analytical biochemical technique of the MBS763175 kit is based on C5 antibody-C5 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect C5 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, C5. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Data & Standard Curve

Results of a typical standard run of a C5 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	ng/ml	0	0.156	0.312	0.625	1.25	2.5	5	10
Y	OD450	0.027	0.387	0.668	0.932	1.359	1.588	1.84	2.015

Typical Testing Data/Standard Curve (for reference only) of C5 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for C5. It may not necessarily be applicable to this product.

NCBI GI #	38016947
NCBI GeneID	727
NCBI Accession #	NP_001726.2
UniProt Secondary Accession #	Q14CJ0; Q27I61
UniProt Related Accession #	P01031
GenBank Nucleotide #	NM_001735.2
NCBI Official Full Name	complement C5 isoform 1 preproprotein
NCBI Official Synonym Full Names	complement component 5
NCBI Official Symbol	C5
NCBI Official Synonym Symbols	C5D; C5a; C5b; ECLZB; CPAMD4
UniProt Protein Name	Complement C5
UniProt Synonym Protein Names	C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4
Protein Family	Complement C5
UniProt Gene Name	C5
UniProt Synonym Gene Names	CPAMD4
UniProt Entry Name	CO5_HUMAN
NCBI Protein Information	complement C5
NCBI Summary for C5	This gene encodes a component of the complement system, a part of the innate immune system that plays an important role in inflammation, host homeostasis, and host defense against pathogens. The encoded preproprotein is proteolytically processed to generate multiple protein products, including the C5 alpha chain, C5 beta chain, C5a anaphylatoxin and C5b. The C5 protein is comprised of the C5 alpha and beta chains, which are linked by a disulfide bridge. Cleavage of the alpha chain by a convertase enzyme results in the formation of the C5a anaphylatoxin, which possesses potent spasmogenic and chemotactic activity, and the C5b macromolecular cleavage product, a subunit of the membrane attack complex (MAC). Mutations in this gene cause complement component 5 deficiency, a disease characterized by recurrent bacterial infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2015]

UniProt Comments for C5	C5: 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. Defects in C5 are the cause of complement component 5 deficiency (C5D). A rare defect of the complement classical pathway associated with susceptibility to severe recurrent infections, predominantly by Neisseria gonorrhoeae or Neisseria meningitidis. 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). Protein type: Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 9q33-q34 Cellular Component: extracellular region; extracellular space; membrane attack complex Molecular Function: chemokine activity; endopeptidase inhibitor activity; protein binding; receptor binding Biological Process: activation of MAPK activity; cell surface receptor linked signal transduction; chemotaxis; complement activation; complement activation, alternative pathway; complement activation, classical pathway; cytolysis; G-protein coupled receptor protein signaling pathway; in utero embryonic development; inflammatory response; innate immune response; positive regulation of angiogenesis; regulation of complement activation; response to stress Disease: Complement Component 5 Deficiency; Eculizumab, Poor Response To
Research Articles on C5	**1.** Complement C5b-9 complex sensitizes 661W photoreceptor cells to both apoptosis and necroptosis.
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