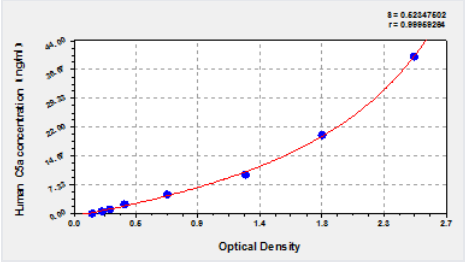
Complement Fragment 5a, C5a (C5A) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Complement fragment 5a, C5a, ELISA Kit
Full Product Name	Human Complement fragment 5a, C5a ELISA Kit
Product Gene Name	C5a elisa kit
Product Synonym Names	Human Complement fragment 5a; C5a ELISA Kit; Complement fragment 5a; C5a
Species Reactivity	Human
Samples	Serum, plasma, tissue homogenates
Detection Range	0.625 ng/ml-40 ng/ml
Sensitivity	0.156 ng/ml
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.
Detection Wavelength	450 nm
Sample Volume	50-100ul
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for C5a elisa kit	**Introduction:** C5a is a protein fragment released from complement component C5. In humans, the polypeptide contains 74 amino acids. NMR spectroscopy proved that the molecule is composed of four helices and loops connecting the helices. On the N terminus a short 1.5 turn helix is also present. The longest helix -IV- develops three disulfide bonds with helix II and III. C5a is rapidly metabolised by a serum enzyme, carboxypeptidase B to a 73 amino acid form, C5a des-Arg. C5a binds to a receptor protein on the surface of target cells, C5aR or CD88. This is a member of the G-protein-coupled receptor superfamily of proteins, predicted to have seven transmembrane helical domains of largely hydrophobic amino acid residues, forming three intra- and three extra-cellular loops, with an extracellular N-terminus and an intracellular C-terminus. C5a binding to the receptor is a two-stage process: an interaction between basic residues in the helical core of C5a and acidic residues in the extracellular N-terminal domain allows the C-terminus of C5a to bind to residues in the receptor transmembrane domains. The latter interaction leads to receptor activation, and the transduction of the ligand binding signal across the cell plasma membrane to the cytoplasmic G protein Gi type GNAI2. **Principle of the Assay:** The microtiter plate provided in this kit has been pre-coated with an antibody specific to C5a. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for C5a and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain C5a, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of C5a in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of C5a 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 C5a purchase	MBS700015 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Complement fragment 5a, C5a, 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 C5a. The ELISA analytical biochemical technique of the MBS700015 kit is based on C5a antibody-C5a antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect C5a antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, C5a. 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 Testing Data/Standard Curve (for reference only) of C5a elisa kit

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/human-elisa-kits/complement-fragment-5a-c5a/700015