

Human Complement fragment 5a, C5a ELISA Kit | C5a elisa kit

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CATALOG #
AAA79444

REACTIVITY
Human

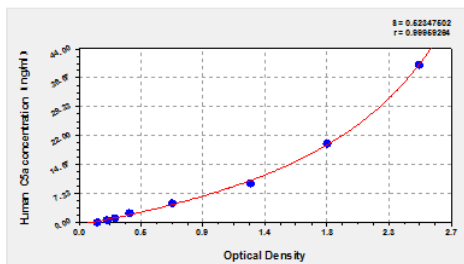
PRODUCT SYNONYMS

Complement fragment 5a; C5a; Human Complement fragment 5a; C5a ELISA Kit; C5a elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Samples	Serum, plasma, tissue homogenates
Detection Range	0.625 ng/ml-40 ng/ml
Sensitivity	0.156 ng/ml
Detection Wavelength	450 nm
Sample Volume	50-100ul
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.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/complement-fragment-5a-c5a/79444>