Anti-C5a [Fab 102] Standard Size Ab00989-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse Fab format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa
Clone Number: Fab 102
Alternative Name(s) of Target: Complement Component 5a
UniProt Accession Number of Target Protein: P01031
Published Application(s): Block, ELISA
Published Species Reactivity: Human
Immunogen: A panel of mAbs against the activated complement component C5a was obtained from a filamentous phage M13-Fab display library generated from mice immunized with human rC5a. Fabs isolated from the library after iterative selection against rC5a bound to both rC5a and purified C5. To isolate Fabs specific for neoepitopes expressed on C5a but not on the native complement component C5, the library was rescreened in a competitive manner. The phage Fab library was first incubated with immobilized C5 to deplete C5 reactive Fabs. The C5 nonadherent phage were then incubated with immobilized rC5a in the presence of soluble C5. Bound phage were eluted and subjected to two additional cycles of subtraction with immobilized C5 and selection with immobilized rC5a in the presence of soluble C5. After three cycles of this competitive biopanning, Fabs reactive with rC5a were isolated.
Specificity: Fab 102 binds only to C5a and not to C5. This antibody is likely to recognise a conformational epitope because it failed to bind C5a when it was linked to microtiter plates. The epitope is outside the active site of C5a.
Application Notes: Fab 102 has been used in ELISAs in order to specifically detect C5a and quantify C5a in human CSF (Stahel 1997). It can be used to block C5a binding to its receptor. mAbs to C5a may have a therapeutic benefit in sepsis/ARDS.
Antibody First Published in: Ames et al. Isolation of Neutralizing Anti-C5a Monoclonal Antibodies from a Filamentous Phage Monovalent Fab Display Library Journal of Immunology, 1994, 152: 4572. PMID:8157971
Note on publication: Describes the generation of the antibody.

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Product Form

Size: 200 µg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.
Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.

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