

**Anti-Complement component C3a/C3a (desArg) (human)
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.

GAU 017-01

Clone: D17/1

PRESENTATION

Preparation: Protein-A/G purified

Content: Available in 200 µL and 1 mL size. 1 mg/mL +/- 15%. See Certificate of Analysis for details.

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide

Storage: 4-8°C without exposure to light. No precautions necessary during handling.

ANTIGEN

Complement C3a is an anaphylatoxin of 77 amino acid residues released by the action of the C3 convertases on the N-terminal of the alpha chain of C3. It is rapidly inactivated by serum carboxypeptidase N which removes the C-terminal arginine residue generating C3a (desArg).

IMMUNOGEN

Human C3a (1, 2)

SPECIFICITY

Recognizes an epitope that is present on human C3, C3a and C3a (desArg) (2, 3).

Does not cross-react with C4a or C5a (2, 3).

EPI TOPE SPECIFICITY

GAU 017-01 recognizes different epitopes on the 9 kDa C3a than GAU 013-16 (2, 3). No reaction is seen with a synthetic octapeptide representing the C3a C-terminal (2).

REACTIVITY

GAU 017-01 can be used as a biotinylated detection antibody in sandwich ELISA with GAU 013-16 capture antibody. Does not inhibit the biological activity of C3a (4).

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

IMMUNIZATION

BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	1, 2
Immunoblotting	Yes	2, 4
Immunohistochemistry	Not determined	

REFERENCES

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4. Puschel GP, Oppermann M, Muschol W, Gotze O, Jungermann K. (1989) Increase of glucose and lactate output and decrease of flow by human anaphylatoxin C3a but not C5a in perfused rat liver. *FEBS Lett.* 16;243(1):83-7.
5. Oppermann M, Kurts C, Zierz R, Quintin E, Weber MH, Gotze O (1991) Elevated plasma levels of the immunosuppressive complement fragment Ba in renal failure. *Kidney Int.* 40:939-947.
6. Ammon HPT, Ege W, Oppermann M, Göpel W, Eisele S (1995) Improvement in the long-term stability of an amperometric glucose sensor system by introducing a cellulose membrane of bacterial origin. *Anal. chem.* 67:466-471.
7. Lhotta K, Würzner R, Kronenberg F, Oppermann M, König P (1998) Rapid activation of the complement system by cuprophane depends on complement component C4. *Kidney Int.* 53:1044-1051.

This product is not for further manufacture

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