ANTIBODYSHOP®

PRODUCT SPECIFICATION

Anti Complement component C3d (human)
Mouse monoclonal antibody

Subclass: IgG_1/k

PRODUCT NO. **HAV 003-05**

PRESENTATION

Preparation:	Protein-A/G purified
Content:	Available in 200 µL and 1 mL, 1 mg/mL
Solvent:	0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15 mM sodium azide
Storage:	In the dark at 4-8ºC

ANTIGEN

C3 is a key component of the complement system since classical and alternative activation pathways merge at the C3 activation step when C3 is split into C3a and C3b. The molecular mass of C3 is 185 kDa and it consists of two chains (110 kDa and 75 kDa) held together by disulfide bonds (1,2).

IMMUNOGEN

C3 isolated from human plasma

SPECIFICITY

HAV 003-05 is specific for human C3d, a fragment of the alpha chain (3)

EPITOPE SPECIFICITY

Epitope specificity differs from that of HAV 004-01 and HYB 030-08

REACTIVITY

HAV 003-05 reacts strongly with C3. Strong reaction is seen in ELISA with human C3 coated directly onto the microtiter well, or when used as detection antibody in sandwich ELISA in combination with a polyclonal C3 antibody (e.g. DAKO A 062). HAV 003-05 also reacts with C3b deposited on coated antibody molecules.
In Western blotting after SDS-PAGE, HAV 003-05 reacts with C3 in both reduced and unreduced forms.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653.

IMMUNIZATION

Female CF1 x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH)3

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1:16,000	
Immunoblotting	Yes		4
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on sandwich ELISA in combination with a polyclonal antibody against the antigen. Users should determine the optimal dilutions for their own purpose.

REFERENCES

1. Law SKA, Reid KBM (1988) Complement. In: In Focus (Ed. Male D) IRL Press: Oxford.
2. Morley BJ and Walport MJ (2000) The Complement FactsBook. Academic Press, London, UK.
3. Nagar B, Jones RG, Diefenbach RJ, Isenman DE, Rini JM (1998) X-ray crystal structure of C3d: a C3 fragment and ligand for complement receptor 2. Science 280:1277-1281.
4. Koch C, Behrendt N (1986) A novel polymorphism of human complement component C3 detected by means of a monoclonal antibody. Immunogenetics 23:322-325.