



**Anti C1s (human, pro- and activated enzyme)
Mouse Monoclonal Antibody**

Subclass: IgG₁/k

PRODUCT NO.

ABS 002-09

PRESENTATION

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

ANTIGEN

C1s proenzyme is a 79.8 kDa glycoprotein produced primarily by hepatocytes (1) but also by other cells (2,3). The proenzyme is produced as a single-chain polypeptide of 688 aa. Upon activation the peptide is cleaved between R437 and I438 giving the activated enzyme consisting of two disulfide-linked chains, A chain (52.2 kDa) and B chain (27.7 kDa). The Ca-dependent catalytic subunit of the C1 complex (C1q, C1r, C1s) comprises of two C1s and two C1r molecules and this serine protease tetramer is responsible for the initial steps in the classical complement pathway, cleavage of C4 and C2 (1,4,5).

IMMUNOGEN

C1s proenzyme purified from human plasma

SPECIFICITY

ABS 002-09 is specific for C1s proenzyme and activated free C1s

EPITOPE SPECIFICITY

Epitope differs from that of ABS 002-49

REACTIVITY

ABS 002-09 reacts in ELISA when tested with activated C1s enzyme directly coated onto the microtiter well or in sandwich ELISA in combination with a polyclonal antibody in coat.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

SP2mIL6.

IMMUNIZATION

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

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1:20,000	
Immunoblotting	Not determined		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 1-2 µg/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

- Thielens N, Arlaud GJ (2000) The Complement FactsBook. Morley BJ, Walport MJ (eds). AP FactsBook Series. Academic Press, London.
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- Morgan BP, Gasque P (1996) Expression of complement in the brain: role in health and disease. Immunol Today 17:461-466.
- Arlaud GJ, Thielens NM (1993) Human complement serine proteases C1r and C1s and their proenzymes. Methods Enzymol 223:61-82.
- Arlaud GJ, Gaboriaud C, Thielens NM, Rossi V (2002) Structural biology of C1. Biochem Soc Trans 30:1001-1006.

CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.