

**Anti-Complement component C1s (human, pro- and activated enzyme)
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.

ABS 002-49

Clone: 49

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

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

Human plasma C1s Proenzyme adsorbed onto aluminum hydroxide gel

SPECIFICITY

ABS 002-49 is specific for C1s proenzyme and activated free C1s and C1s in complex with C1 inhibitor.

EPITOPE SPECIFICITY

Epitope differs from that of ABS 002-09

REACTIVITY

ABS 002-49 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 by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	
Immunoblotting	Not determined	
Immunohistochemistry	Not determined	

REFERENCES

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- Strunk RC, Colten HR (1993) Complement in Health and Disease, 2nd edition, Whaley K, Loos M, Weiler JM (eds). Kluwer Academic Publications, Dordrecht.
- 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

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