

# CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

**Product name** Activated C1s, Human, clone M241

Catalog number HM2109-100UG

Lot number xxxxxXxxxx-X Expiry date MMM YYYY

Volume 1 ml Amount 100 μg

Formulation 0.2 µm filtered in PBS+0.1%BSA Concentration 100 µg/ml

Host Species Mouse IgG2a Conjugate None

Endotoxin <24 EU/mg Purification Protein G

Storage 4°C

### **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•	•		•	•	•	•	•
No								
N.D.			•					

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

FS: Monoclonal antibody M241 can be used for inhibition of biological activity. For inhibition of biological activity dilutions have to be
made according to the amounts C1s to be inactivated.

# **General Information**

#### Description

Monoclonal antibody M241 reacts with an epitope on human C protein activated C1s, a subcomponent of the first component of C (C1). Activated C1s is a glycosylated single-polypeptide zymogen of 85 kD. Activation of the proenzyme C1s occurs through cleavage by the active form of C1r. The activated protease, activated C1s, consists of a disulfide-linked H chain and a L chain. Activated C1s is a serine protease and its catalytic site is located in the L chain. Activation of the classical C pathway is triggered by activated C1s which cleaves C4 and C2 to form the C3 convertase, C4bC2a. The epitope recognised by the antibody M241 is domain IV and/or V of the gamma-domain of activated C1s. Monoclonal antibody M241 blocks C4 activation and C4 binding to activated C1s. The antibody binds specifically to the active centre of C1s.

### References

- Matsumoto, M et al; Probing the C4-binding site on C1s with monoclonal antibodies, evidence for a C4/C4bbinding site on the gamma-domain. J Immunol 1989, 8: 2743
- Nakagawa, K et al; Complement C1s activation in degenerating articular cartilage of rheumatoid arthritis patients: immunohistochemical studies with an active form specific antibody. Ann Rheum Dis 1999, 58: 175

# Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

### **Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 14/07/2023

Version: 12-2019

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.