

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	C1s, Human, clone M81		
<b>Catalog number</b>	HM2108-500UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	-	<b>Amount</b>	500 µg
<b>Formulation</b>	0.2 µm filtered in PBS	<b>Concentration</b>	>0.5 mg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	<24 EU/mg	<b>Purification</b>	Protein G
<b>Storage</b>	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 M81 to C1s is capable of inhibiting C4 binding and activation.

**General Information**

<b>Description</b>	Monoclonal antibody M81 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, MW 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 M81 is domain IV and/or V of the gamma-domain of activated C1s. Monoclonal antibody M81 blocks C4 activation and C4 binding to activated C1s. The antibody reacts around the binding site of C1s and reacts with both active and inactive C1s.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Matsumoto, M et al; Probing the C4-binding site on C1s with monoclonal antibodies, evidence for a C4/C4b-binding site on the gamma-domain. J Immunol 1989, 8: 2743</li> <li>2. 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</li> </ol>
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
<b>Precautions</b>	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  
05/11/2019

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).