

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	C1, Human, Natural	<b>Expiry date</b>	-
<b>Catalog number</b>	HC2122	<b>Activity</b>	C1H50 Units/mg
<b>Lot number</b>	-	<b>Amount</b>	~200 µg
<b>Volume</b>	-	<b>Concentration</b>	~200 µg/ml
<b>Formulation</b>	50mM NaAcetate+50mM EACA+10mM Benzamidine+10mM EDTA+300mM NaCl+40% glycerol, pH 5.5	<b>Purification</b>	N.A.
<b>Host Species</b>	Human, isolated from healthy blood donors	<b>Purity</b>	≥70%
<b>Endotoxin level</b>	N.A.		
<b>Storage</b>	-70°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

Human blood test results	
HBsAg	negative
Anti-HCV	negative
Anti-HIV 1 and 2	negative
HTLV-I/II	negative
STS	negative

The blood donors have been tested and found negative for various viruses.

For functional studies, in vitro dilutions have to be optimized in user's experimental setting.

- The biological activity of C1 is defined as the amount of C1 required to yield 50% lysis of sensitized erythrocytes (EA).

**General Information**

<b>Description</b>	Human complement protein C1 is the first component of the classical complement pathway. Activation of the C1-complex (composed of C1q, C1r and C1s, forming C1qr2s2), occurs when C1q binds to IgM or IgG complexed with antigens, or when C1q binds directly to the surface of the pathogen. Activation of C1r and C1s occurs and so initiates the classical pathway of complement activation. The C1 activation products split C4 and then C2, producing C4b2a complex, which promotes cleavage of C3 into C3a and C3b.
<b>Cross reactivity</b>	≤ Trace amounts of IgG, IgA, IgM, albumin, C2, C3, C4, or C5
<b>Storage&amp;stability</b>	Product should be stored at –70°C. Repeated freeze and thaw cycles will cause loss of activity. Use C1 protein within 24 hours after thawing and keep on ice. Remainder amounts should be aliquoted and immediately re-frozen for future use. Aliquots should never be thawed more than once. 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.

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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  
Robbert Zwinkels

Date  
06/07/2018

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