CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	C2, Human, Natural		
Catalog number	HC2124		
Lot number	-	**Expiry date**	-
Volume	0.1 ml	**Activity**	C2H50 Units/mg
Formulation	PBS, pH 6.0	**Amount**	~50 µg
Host Species	Human, isolated from healthy blood donors	**Concentration**	~0.5 mg/ml
Endotoxin	N.A.	**Purification**	N.A.
Storage	-70°C	**Purity**	≥90%

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

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

- FS: The biological activity of C2 is defined as the amount of C2 required to yield 50% lysis of sensitized erythrocytes (EA). For functional studies, in vitro dilutions have to be optimized in user's experimental setting.

General Information

Description C2 is central to the activation of both the classical and the lectin pathways of complement. It forms the proteolytic subunit of the C3 and C5 convertase of both pathways. Initiation of each pathway generates proteolytic enzyme complexes which are bound to the target surface (C1q/C1r/C1s in the classical pathway and MBL/ Ficolin/ MASPs in the lectin pathway). C1s and MASP in these complexes activate both C4 and C2. They cleave a peptide bond in C4 depositing C4b on the surface. They also cleave C2 into two fragments. The larger fragment (C2a) binds to C4b and forms the C3/C5 convertase enzyme complex C4b,C2a. C2 and factor B are the two most heat sensitive complement components. Both may be largely inactivated by a 6 minute incubation at 56°C. Care must be taken not to inactivate the many other heat sensitive complement components and it should be noted that heat inactivation only reduces the concentration of active C2, it does not completely inactivate it or remove the C2 protein.

Cross reactivity Trace amounts of C1, C3, C4, C5, Factor B, albumin, IgM, IgG, IgA or hemopexin

Storage&stability Product should be stored at –70°C. Repeated freeze and thaw cycles will cause loss of activity. Use C2 protein within 24 hours after thawing and keep on ice. Remainder amounts should be aliquoted and immediately re-freezed 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.

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 Date

Robbert Zwinkels 27/03/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.