

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	C3, Human, Natural	Expiry date	-
Catalog number	HC2125	Activity	C3H50 Units/mg
Lot number	-	Amount	~250 µg
Volume	0.25 ml	Concentration	>1 mg/ml
Formulation	PBS, pH 7.2	Purification	N.A.
Host Species	Human, isolated from healthy blood donors	Purity	>85%
Endotoxin	N.A.		
Storage	-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
HTLV-I/II	negative
STS	negative
Anti-HIV-1	negative
Anti-HIV-II	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.

- FS: The biological activity of C3 is defined as the amount of C3 required to yield 50% lysis of sensitized erythrocytes (EA).

General Information

Description	The third complement component, C3, is central to the classical, alternative and lectin pathways of complement activation. Activation products of the complement cascade contain neo-epitopes that are not present in the individual native components. The complement factor C3 consists of an alpha- and a beta-chain. The synthesis of C3 is tissue-specific and is modulated in response to a variety of stimulatory agents. C3 is the most abundant protein of the complement system with serum protein levels of about 1.3 mg/ml. An inherited deficiency of C3 predisposes the person to frequent assaults of bacterial infections. In ulcerative colitis, and idiopathic chronic inflammatory bowel disease, the deposition of C3 in the diseased mucosa has been reported. Proteolysis by certain enzymes results in the cleavage of C3 into C3a and C3b. C3b becomes attached to immune complexes and is further cleaved into iC3b, C3c, C3dg and C3f. The monoclonal antibody 11H9 recognizes both intact C3 and its cleaved products C3b, iC3b, C3d and C3dg. These activation products are present in acute as well as chronic inflammatory conditions. In chronic inflammatory condition, primarily the C3dg product resides at the place of inflammation (C3c being cleared). The chronic processing/activation of C3 is taking place at a lower level, which would reduce detection of the C3 fragments C3b, iC3b, and C3c.
Cross reactivity	Trace amounts of C4, albumin, IgM, IgG, IgA, Factor B, Factor H, Factor I or Ceruloplasmin
Storage&stability	Product should be stored at -70°C. Repeated freeze and thaw cycles will cause loss of activity. Use C3 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.

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
27/03/2018

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