

# CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

Product name C3c, Human, clone 4

Catalog number HM2200-20UG

Lot number - Expiry date -

Volume 200 μl Amount 20 μg

Formulation 0.2 μm filtered in PBS+0.1%BSA+0.02%NaN3 Concentration 100 μg/ml

Host Species Rat IgG2a Conjugate None

Endotoxin N.A. 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 1:50.

#### **General Information**

# Description

The monoclonal antibody 4 recognizes the cleaved human C3 fragment C3c. The complement system is an important factor in innate immunity. 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 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 bacterial infections. C3 fragments are deposited in tissues at sites of antibody-mediated immunopathology. In ulcerative colitis and idiopathic chronic inflammatory bowel disease, the deposition of C3 in the diseased mucosa has been reported. Proteolysis by C3-convertases results in the cleavage of C3 into C3a and C3b. C3b becomes attached to immune complexes and is further cleaved into iC3b and C3f. iC3b is further processed into C3c and C3dg. The monoclonal antibody 4 recognizes a conformational epitope in C3c, C3b and iC3b.

### References

- 1. Lachmann, P et al; Three monoclonal antibodies to human C3. Immunology 1980, 41: 503
- Lachmann, P et al; Breakdown of C3 after complement activation. Identification of a new fragment C3g, using monoclonal antibodies. J Exp Med 1982. 156: 205
- Lachmann, P et al; Use of monoclonal anti-C3 antibodies to characterise the fragments of C3 that are found on erythrocytes. Vox Sang 1983, 45: 367

#### 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 13/09/2019

Version: 09-2019

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