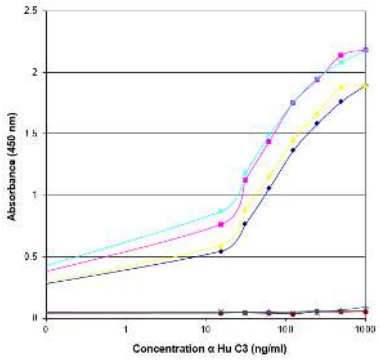
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	C3/C3b, Human, clone 755		
Catalog number	HM2072-100UG		
Lot number	-	**Expiry date**	-
Volume	1 ml	**Amount**	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

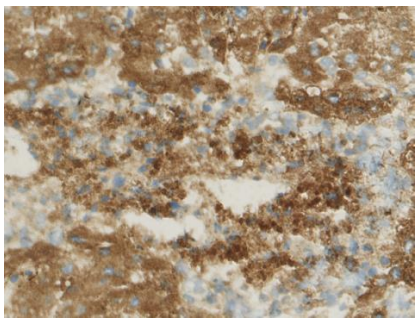
Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #					1			1,2
Yes	●	●				●		●
No					●			
N.D.			●	●			●	

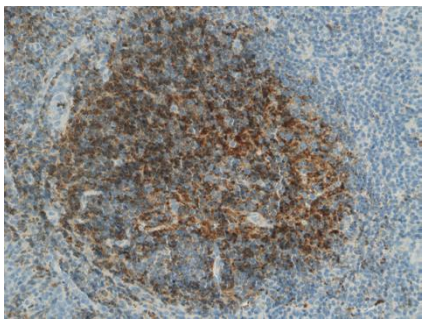
N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IA: Specificity test of HM2072. HM2072 was used as a detection antibody in different concentrations.



IHC-F: Frozen section of human liver tissue. Dilution used of HM2072 was 1:50.



IHC-P: Paraffin embedded section of human tonsil tissue. Dilution used of HM2072 was 1:200.

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.

- IHC-F: Incubation with primary antibody (1:50) for 30 minutes at 37 degrees.
- IHC-P: Following deparaffinization and heat-induced antigen retrieval, EDTA pH 8.0 (32 minutes), the tissue samples were incubated with primary antibody (1:200) for 32 minutes at 37 degrees.
- W: A non-reduced or reduced sample treatment and SDS-PAGE was used. The band size (s) are ~190 and ~100 kDa under non-reducing and reducing conditions respectively. (Ref.1)
- Positive control: Human serum; Negative control: C3 deficient serum.

General Information

Description

The monoclonal antibody 755 recognizes an epitope located in the C-terminal 360 amino acids on the alpha chain of C3, thereby recognizing C3b and full C3. 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. 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 a 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. After activation of the complement system, certain enzymes become active, resulting in the cleavage of C3 into C3b and the anaphylatoxin C3a. C3b becomes attached to immune complexes and is further cleaved into iC3b, C3c, C3dg and C3f. Within the alternative pathway of complement, C3b plays a critical role in the amplification loop initiated by spontaneous hydrolysis of C3.

Immunogen	Native C3
Aliases	Complement component 3
References	1. Klos, A et al; Detection of native human complement components C3 and C5 and their primary activation peptides C3a and C5a (anaphylatoxic peptides) by ELISAs with monoclonal antibodies. J Immunol Meth 1988, *111*: 241 2. Hawlisch, H et al; Guinea pig C3 specific rabbit single chain Fv antibodies from bone marrow, spleen and blood derived phage libraries. J Immunol Meth 2000, *236*: 117 3. Friebe, A et al; Immunomodulatory Effects of Inactivated Parapoxvirus Ovis (Orf Virus) on Human Peripheral Immune Cells: Induction of Cytokine Secretion in Monocytes and Th1-Like Cells. J virol 2004, *78*:9400
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	Date
Brenda Teunissen	02/12/2019

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