CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	C7, Human, clone WU 4-15		
Catalog number	HM2277-20UG		
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	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 #								
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 WU 4-15 recognizes C7, one of the components of the terminal complement complex (TCC), also known as the membrane attack complex (MAC). Proteolytic cleavage of C5 by C5 convertase generates C5b which initiates assembly of the C5b-9 MAC. This complex is assembled from five precursor molecules in the serum, finalized with the polymerization of C9 which accompanies insertion of the complex into the cell membrane causing cellular lysis. C7 occupies an important position in the TCC cascade. C7 undergoes a hydrophilic-amphiphilic transition following activation. It enables the developing MAC to bind directly to target cell membranes. C7 has been shown to exhibit genetic polymorphism. Polymorphonuclear leukocytes represent a major source of C7. The fact that inflammatory cells have the potential to secrete C7 suggests an important role for locally produced complement in the inflammatory process. The monoclonal antibody WU 4-15 identifies an specific allotype of C7: C7 M. 62% of the caucasians is homozygous for C7 M, 31% heterozygous. Antibody Wu 4-15 enables to quantify the contribution of locally synthesized C7 to the inflammatory process and to identify the allotype.

Immunogen

Human C7.

References

1. Würzner R et al; Inhibition of terminal complement complex formation and cell lysis by monoclonal antibodies. Complement and Inflammation 1991, 8: 328
2. Würzner R et al; Functionally active complement proteins C6 and C7 detected in C6- or C7- deficient individuals. Clin and Exp Immunol 1991, 83: 430
3. Würzner R et al; Blood dendritic cells carry terminal complement complexes on their cell surface as detected by newly developed neoepitope-specific monoclonal antibodies. Immunology 1991, 74: 132
4. Høgåsen AKM et al; Human polymorphonuclear leukocytes store large amounts of C7 and C6 which may be released on stimulation. J of Immunol 1995, 154: 4734
5. Würzner R et al; Complement C7: assessment of in-vivo synthesis after liver transplantation reveals that hepatocytes do not synthesise the majority of human C7. Journal of Immunol 1994, 152: 4624
6. Würzner R et al; Molecular basis of the complement C7 M/N polymorphism: a neutral amino acid substitution outside the epitope of the allospecific monoclonal antibody WU 4-15. J. Immunol. 1995, 154: 4813

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	09/12/2020

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