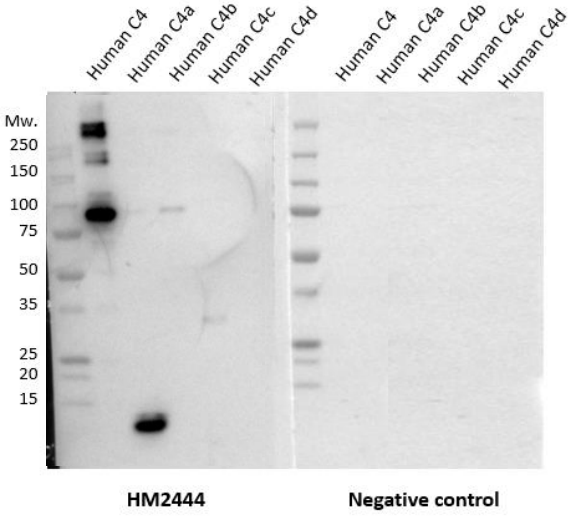
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	C4, Human, clone BSI1306		
Catalog number	HM2444-100UG		
Lot number	xxxxxXxxxx-X	**Expiry date**	MMM YYYY
Volume	1 ml	**Amount**	100 µg
Formulation	0.2 µm filtered in PBS+0.02%NaN3+0.1%BSA	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	<24 EU/mg	**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



W: Purified C4 proteins were resolved on gel under reducing conditions and detected with antibody HM2444 at 2 µg/ml

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.

- W: A reduced sample treatment and SDS-Page was used. The derivative band sizes of C4 (~200 kDa) are C4a (~9 Kda) and the α-chain (~96 Kda).

General Information

Description

The monoclonal C4 antibody BSI1306 (HM2444) recognizes an epitope on the α-chain of C4. The C4 glycoprotein is a large key molecule in the activation of the classical and lectin pathway. The formed proteolytic complexes of both pathways lead to cleavage of C4 thereby releasing the anaphylotoxin C4a and the pathway activating C4b. Binding of C4b to the cell surface leads to the formation of the C5 convertases, which is the start of the terminal pathway of complement. C4 functions as an acute phase protein and has a concentration of 150-600 µg/ml in healthy individuals. The majority of the protein is synthesized in the liver but also locally by among others monocytes, macrophages, lung, spleen, kidney and intestinal epithelial cells. After activation of C4 the nascent C4b is quickly inactivated by its reaction with water. Only surface bound C4b forms the basis of formation of the CP/LP convertases. Total C4 concentration reflects potential to activate the complement system via the classical or lectin pathway.

Aliases	C4, Complement component 4
Cross reactivity	C4a: Yes; C4b: Yes; C4c: Yes; C4d: No.
References	1. Uzonyi, B., et Al. Functional characterization of monoclonal antibodies against human complement C4 and C4BP, 2023. Immuno biol. Vol. 228, 5; 152630.
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

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