CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Complement factor D, Human, clone I8/1		
Catalog number	HM2259		
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 #								
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 I8/1 recognizes human complement factor D. Factor D, a 27 kDa serine protease of the alternative complement pathway, is synthesized as a precursor single-chain molecule. The alternative complement pathway represents an important humoral component of natural defense against microbial attack. The participation of the alternative complement pathway has been implicated in the pathogenesis of a wide variety of human diseases. Factor D is unique among serine proteases in that it requires neither enzymatic cleavage for expression of proteolytic activity nor activation by a serpin for its control. Factor D is highly specific and cleaves factor B bound to C3b, generating the C3bBb enzyme. Factor D is the rate-limiting C3 convertase enzyme of the alternative pathway. It has both the lowest plasma concentration and the lowest molecular weight of all complement components. Normal values in human EDTA plasma and urine are 1.05 (± 0.27) and 0.62 (± 0.33) µg/ml, respectively. In normal human subjects, factor D is rapidly eliminated via the kidney. Compared to controls, plasma and urine levels of factor D in patients with renal failure are elevated. Elevated plasma levels return to normal levels within seven days after successful renal transplantation to prevent overstimulation of the complement pathway. Human adipsin, a protein that is expressed at high levels in adipose tissue, is identical to factor D and also displays the same enzymatic activity as factor D. This suggests that factor D plays a role in fatty tissue distinct from its role as a complement protein.

Immunogen

Serum purified human factor D.

Aliases

C3 convertase activator, Properdin factor D, Adipsin

References

1. Oppermann, M et al; Quantitation of components of the alternative pathway of complement (APC) by enzyme-linked immunosorbent assays. J Immunol Methods 1990: *133*, 181
2. Oppermann, M et al; Elevated plasma levels of the immunosuppressive complement fragment Ba in renal failure. Kidney Int 1991: *40*, 939
3. Mavri, A et al; Impact of adipose tissue on plasma plasminogen activator inhibitor-1 in dieting obese women. Arterioscler Thromb Vasc Biol 1999, *19*: 1582

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
Robbert Zwinkels	19/03/2018

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