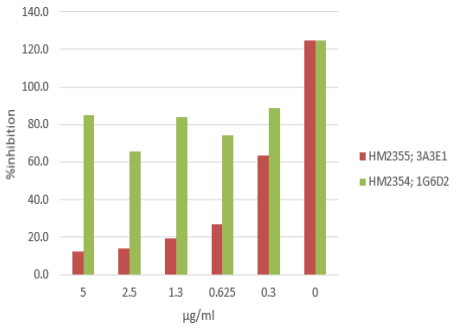
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Properdin, Human, clone 1G6D2		
Catalog number	HM2354-500UG		
Lot number	xxxxxXxxxx	**Expiry date**	MMM YYYY
Volume	xx ml	**Amount**	500 µg
Formulation	0.2 µm filtered in PBS	**Concentration**	>0.5 mg/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 #					1			
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



FS: Inhibition of the alternative complement pathway tested with HM2354 as a control for not inhibiting and HM2355 as an inhibition antibody. Different concentrations have been tested (0 – 5 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 non-reduced sample treatment was used. The band size is 52 kDa.
- Positive control: HM2355: Properdin, Human, clone 3A3E1; Negative control: HM2354: Properdin, Human, clone 1G6D2.

General Information

Description

Monoclonal antibody 1G6D2 recognizes human properdin, also called complement factor P. The complement system is the first line of defense against pathogens and facilitates elimination of apoptotic and damaged cells. Positive regulator plasma protein properdin is critical for the alternative pathway of complement. It is a single-chain glycoprotein (ca 53kDa) consisting of six TSR sequences. In the blood it exists as a mixture of preferably head-to-tail trimers, but also dimers and tetramers. The protein is produced by leukocytes, like activated neutrophils monocytes and T-lymphocytes, but also by eg. stressed endothelial cells. Properdin can both initiate and positively regulate the alternative pathway activity together with C3 and factors B, D, I and H. It binds to C3b where It stabilizes the labile C3bBb convertase which is deposited on immune complexes or foreign surfaces. Thereby enhancing the AP by stimulation of amplification of C3bBb-convertase formation in competition with catabolism of C3b by factor I, which uses factor H as a cofactor. The local amplification process leads to the creation of the alternative pathway C5 convertase, C3bBb3b, and initiates the terminal pathway of complement activation. The alternative pathway may account for ca 80% of the terminal pathway activity. Properdin has also been shown to directly limit factor H activity. Recent studies show that properdin is also a pattern-recognition receptor (PRR) able to bind directly to microbial surfaces, apoptotic and necrotic cells (dangerous nonself and altered self). Inappropriate activation or dysregulation of the alternative pathway is a critical factor in development of several autoimmune conditions. Targets opsonized with

	properdin are labeled for clearance by scavenger cells, even without complement. This makes it a potential therapeutic target in diseases. Recent studies has shown renewed interest in the evaluating role of properdin in disease pathogenesis, like Asthma, arthritis, septic shock, AMD and C3 glomerulopathy. Antibody 1G6D2 can be used in ELISA, western blotting (only non-reduced) and as negative control antibody for functional studies inhibiting the alternative pathway of complement (Ref 1).
Immunogen	Human properdin purified from human plasma.
Aliases	Complement factor P
Gene	Gene name: CFP, PFC
References	1. Blatt A et al; Properdin-mediated C5a production enhances stable binding of platelets to granulocytes in human whole blood. J Immunol 2016; *196*: 4671
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	13/01/2020

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