CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	DAF, Human, clone 1C6		
Catalog number	HM2280-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+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 #				3,4	1	2		4
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. For functional studies, in vitro dilutions have to be optimized in user's experimental setting.

General Information

Description

The monoclonal antibody 1C6 recognizes human complement decay-accelerating factor (DAF), also designated as CD55. Cells express on their surface several proteins which protect against complement attack, namely complement receptor I (CR1), decay-accelerating factor (DAF), membrane cofactor protein (MCP) and CD59. CR1, DAF and MCP regulate the activation pathways of complement by either accelerating decay of the C3 and C5 convertase (CR1, DAF), or acting as cofactors for the serine protease factor I, which cleaves and irreversibly inactivates C3b (CR1, MCP).
Human DAF (CD55) is a protein of 381 amino acids resulting in a ~ 60 kDa transmembrane protein that binds C3b and C4b to inhibit formation and half-life of the C3 convertases. It belongs to the receptors of complement activation (RCA) family. DAF is broadly distributed among cells in contact with plasma complment proteins, including both haematopoietic and non-haematopoietic cells. Although DAF does not have an essential role in controling hemolysis of erythrocytes, it has an important role in regulation of the deposition of C3 on nucleated cells. Together with other complement regulators DAF protects self-cells from autologous complement-mediated injury. DAF cooperates with CD46 in circumventing autologous C3 deposition, while CD59 inhibits the pathway at the critical end-point. DAF is overexpressed in certain tumors thereby limiting the complement-dependent cytotoxiticy of therapeutic anticancer antibodies. Using DAF blocking antibodies targeted specifically at cancer cells in combination with immunotherapeutic monoclonal antibodies of cancer may improve the therapeutic effect in cancer patients.

Immunogen

Purified DAF from pooled human erythrocyte stroma.

Aliases

CD55

Cross reactivity

Cynomolgus monkey: Yes.

References

1. Fujita, T et al; The mechanism of action of decay-accelerating factor (DAF). DAF inhibits the assembly of C3 convertases by dissociating C2a and Bb. J Exp Med 1987, *166*: 1221.
2. Higuchi, M et al; Identification of the decay-accelerating factor CD55 as a peanut agglutinin-binding protein and its alteration in non-small cell lung cancers. Clin Cancer Res 2006, *12*: 6367
3. Xu, H et al; Investigation of cynomolgus monkey complement. Transplantation Proceedings 2008, *40*: 607
4. Okura, E et al; Differential human serum-mediated neutralization of PERV released from pig cells transfected with variants of hDAF. Xenoptransplantation 2008, *15*: 365

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.