

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	DAF, Rat, clone RDIII-7	Expiry date	-
Catalog number	HM3035-20UG		
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 #	3-5		4,5	2,3	2,3,6			1-6
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.

- FS: RDIII-7 antibody completely blocked the protective effect of expressed rat DAF.
- W: non-reduced with a band size of 60-70kDa. As positive control CHO-rat DAF hyper-expressing cells were used.

General Information

Description	The monoclonal antibody RDIII-7 recognizes complement decay accelerating factor (DAF), also designated as CD55. RDIII-7 recognizes the common extracellular SCR region of CD55, detecting all isoforms of the protein. Cells express on their surface several proteins which protect against complement attack, namely C 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). Rat DAF (CD55) is 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 complement proteins, including both haematopoietic and nonhaematopoietic cells. Although DAF does not have an essential role in controlling 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.
Immunogen	NIH-3T3 cells expressing GPI-anchored rat DAF
Aliases	Complement Decay Accelerating Factor, CD55
References	<ol style="list-style-type: none"> 1. Spiller, B et al; Efficient generation of monoclonal antibodies against surface-expressed proteins by hyperexpression in rodent cells. J Immunol Methods 1999, 224: 51 2. Harris, C et al; Human and rodent decay-accelerating factors (CD55) are not species restricted in their complement-inhibiting activities. Immunol 2000, 100: 462 3. Spiller, B et al; Tissue distribution of the rat homologue of decay accelerating factor. Immunol 1999, 97: 374 4. Mizuno, M et al; Spermatogenic cells distal to the blood-testis barrier in rats lack C3 convertase regulators and may be at risk of complement-mediated injury. J Reprod Immunol 2006, 69: 23 5. Mizuno, M et al; CD55 in rat male reproductive tissue: Differential expression in testis and expression of a unique truncated isoform on spermatozoa. Mol Immunol 2007, 44: 1613 6. Harris, C et al; Coupling complement regulators to immunoglobulin domains generates effective anti-complement reagents with extended half-life in vivo. Clin Exp Immunol 2002, 129: 198
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
Brenda Teunissen

Date
11/01/2021

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