

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

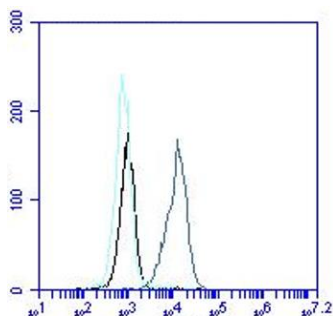
Product name	CD59, Human, clone MEM-43		
Catalog number	HM2120-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 µg/ml
Host Species	Mouse IgG2a	Conjugate	None
Endotoxin	N.A.	Purification	Protein A
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS*	IA	IP	W
Reference #				4	3		1,4	3
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

*If you are interested to use this antibody for functional studies, please contact us for bulk, azide free and low endotoxin opportunities.



FC: Flow cytometric detection of CD59. Black, light blue and dark blue line represent cells only, Isotype control and HM2120 with a concentration of 2 µg/100000 cells respectively.

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 1:10.

- W: non-reduced.
- FS: the antibody can be used for inhibition studies of LPS binding by keratinocytes. For neutralization of biological activity dilutions have to be made according to the amounts endotoxin to be inactivated.

General Information

Description The antibody is the prototypic antibody for the CD59 determinant, a PI-linked glycoprotein of 18-25 kDa, which is broadly expressed on most types of cells. The antigen is the major complement-protecting molecule of human cells. It is expressed on all leukocytes, erythrocytes and most other cell types. Binding of this antibody inhibits the complement-protecting activity of CD59. CD59 is one of the complement regulatory membrane proteins that is missing in Paroxysmal Nocturnal Haemoglobinuria (PNH). Anti CD59 reagents may be useful in the differential diagnosis of PNH type II and PNH type I. Recently a role for CD59 in LPS signal transduction has been reported in keratinocytes. The antibody reacts with well-defined epitope (W40, R-53) on CD59 molecule.

- References**
1. Davies, A et al; CD59, an LY-6-like protein expressed in human lymphoid cells, regulates the action of the complement membrane attack. J exp med 1989, 170:637
 2. Meri, S et al; Human protectin (CD59), an 18,000-20,000 MW complement lysis restricting factor, inhibits C5b-8 catalysed insertion of C9 into lipid bilayers. Immunol 1990, 71: 1

3. Clayton, A et al; Antigen-presenting cell exosomes are protected from complement-mediated lysis by expression of CD55 and CD59. Eur J Immunol 2003, 33: 522
4. Cai, B et al; Rapid Degradation of the Complement Regulator, CD59, by a Novel Inhibitor. J Biol Chem 2013, 17: 12109

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
18/11/2020

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