Product Datasheet

CD59 Antibody (MEM-43/5) - BSA Free
NB500-400

Unit Size: 0.1 mg

Store at 4C. Do not freeze.

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Publications: 3

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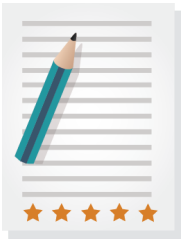
Updated 10/23/2024 v.20.1



NB500-400

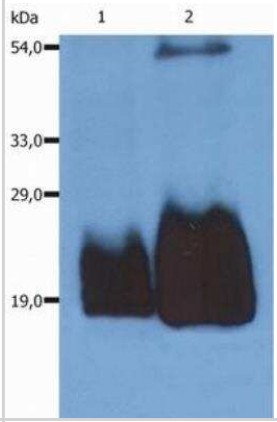
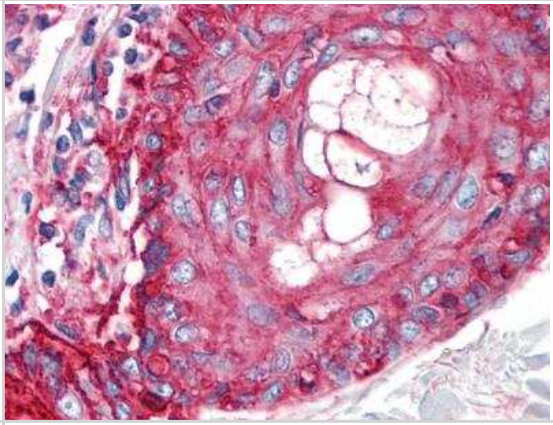
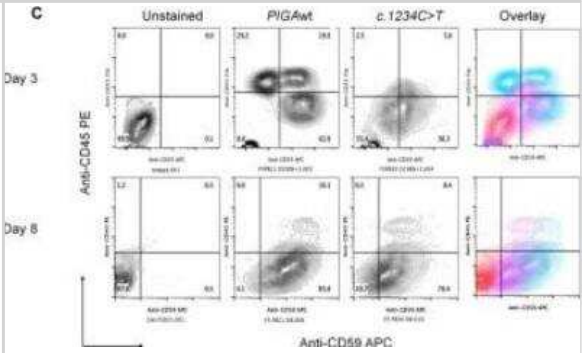
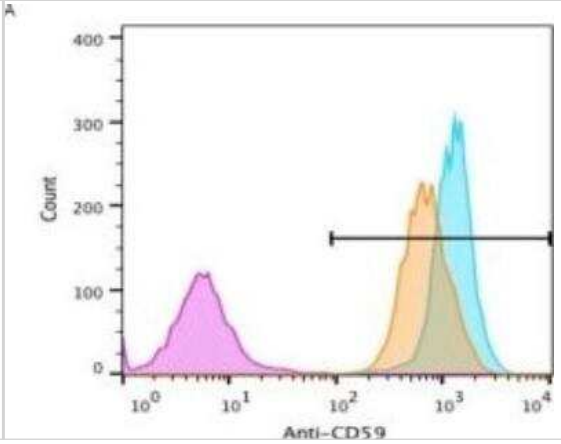
CD59 Antibody (MEM-43/5) - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Monoclonal
Clone	MEM-43/5
Preservative	0.9% Sodium Azide
Isotype	IgG2b
Purity	Protein A purified
Buffer	PBS (pH 7.4)
Target Molecular Weight	20 kDa

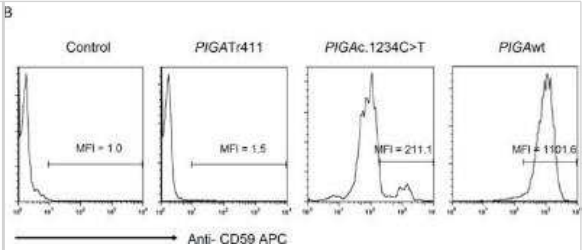
Product Description	
Host	Mouse
Gene ID	966
Gene Symbol	CD59
Species	Human, Mouse
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Specificity/Sensitivity	The antibody MEM-43/5 reacts with well defined epitope (around L33) on CD59 (Protectin), a 18-20 kDa glycosylphosphatidylinositol (GPI)-anchored glycoprotein expressed on all hematopoietic cells; it is widely present on cells in all tissues. The MEM-43/5 does not compete with most other CD59 antibodies. HLDA V; WS Code AS S012
Immunogen	Thymocytes and T lymphocytes.

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, CyTOF-ready
Recommended Dilutions	Western Blot 1-2 ug/ml, Flow Cytometry 0.5-4 ug/ml, Immunohistochemistry, Immunoprecipitation 1:50, Immunohistochemistry-Paraffin 5 ug/ml, CyTOF-ready
Application Notes	Western Blot - Non-reducing conditions. This antibody is CyTOF ready.

Images

Western Blot: CD59 Antibody (MEM-43/5) [NB500-400] - Fig. 1. Western Blotting analysis (non-reducing conditions) of whole cell lysate of HPB-ALL human peripheral blood T cell leukemia cell line using anti-CD59 (MEM-43/5). Lane 1: original cell lysate Lane 2: material immunoprecipitated with anti-human CD59 (MEM-43).	
Immunohistochemistry-Paraffin: CD59 Antibody (MEM-43/5) [NB500-400] - Staining of human skin (paraffin sections) using anti-CD59 (MEM-43/5).	
Flow Cytometry: CD59 Antibody (MEM-43/5) [NB500-400] - The PIGAc.1234C>T mutation does not impair terminal hematopoietic differentiation during mesoderm induction. Representative example of FACS analysis of hematopoietic phenotypes in the EB-BLCs from PIGAwt and PIGAc.1234C>T. The zebra plot shows expression of CD59 (X-axis) and CD45 (Y-axis) after three and eight days of hematopoietic differentiation. Unstained PIGAwt cells were used as a control. Abbreviations: CFU-Macrophage (M); CFU-Granulocyte-Macrophage (GM); committed erythroid BFU-E (BFU) and CFU-E (CFU) progenitors; multipotent progenitor cells CFU-GEMM (GEMM). Image collected and cropped by CiteAb from the following publication (//dx.plos.org/10.1371/journal.pone.0174074), licensed under a CC-BY license. Data from the APC-conjugated form of anti-CD59 MEM-43/5.	
Flow Cytometry: CD59 Antibody (MEM-43/5) [NB500-400] - The PIGAc.1234C>T mutation increases PIGA function compared to PIGAnull hiPSCs.(A). Representative example of FACS analysis CD59 expression in the three hiPSC lines. Overlay histogram shows that CD59 expression was significantly higher in PIGAc.1234 C>T hiPSCs compared to PIGAnull hiPSCs. MFI was 445.4 in PIGAwt hiPSCs and 332.6 in PIGAc.1234C>T hiPSCs (p>0.05, NS). However, MFI in PIGAc.1234C>T hiPSCs was significantly higher than 17.9 in PIGAnull hiPSCs (*pT hiPSCs. PIGAnull hiPSCs (purple), PIGAc.1234C>T hiPSCs (orange) and PIGAwt hiPSCs (blue). Image collected and cropped by CiteAb from the following publication (//dx.plos.org/10.1371/journal.pone.0174074), licensed under a CC-BY license. Data from the APC-conjugated form of clone MEM-43/5.	

Flow Cytometry: CD59 Antibody (MEM-43/5) [NB500-400] - Generation of PIGAc.1234C>T mutation using the PiggyBac transposon system. Representative FACS analysis CD59 expression in TF1PIGAnull cells transfected with PB-PIGAwt, PB-PIGAc.1234C>T or PB-PIGAtr411. Transfected TF1PIGAnull cells were stained with an APC-conjugated CD59 antibody to assess PIGA gene expression. Non-transfected TF1PIGAnull cells were used as a control. MFI represents mean fluorescence intensity. Image collected and cropped by CiteAb from the following publication (//dx.plos.org/10.1371/journal.pone.0174074), licensed under a CC-BY license. Data from the APC-conjugated form of MEM-43/5.



Publications

Cheng X, He D, Liao C et al. IL-1/IL-1R signaling induced by all-trans-retinal contributes to complement alternative pathway activation in retinal pigment epithelium J Cell Physiol 2020-10-09 [PMID: 33034385]

Yuan X, Li Z, Baines AC et al. A hypomorphic PIGA gene mutation causes severe defects in neuron development and susceptibility to complement-mediated toxicity in a human iPSC model. PLoS ONE. [PMID: 28441409] (FLOW, Human)

Details:
Citation using the Allophycocyanin form of this antibody.

Su Z, Wang X, Gao X et al. Excessive activation of the alternative complement pathway in autosomal dominant polycystic kidney disease. J. Intern. Med. 2014-03-03 [PMID: 24494798] (WB, Human)

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Products Related to NB500-400

NBL1-08958	CD59 Overexpression Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP2-27231	Mouse IgG2b Isotype Control (MPC-11)

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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