Product Datasheet

CD63 Antibody (MEM-259) - BSA Free
NB100-77913

Unit Size: 0.1 mg

Store at 4C. Do not freeze.

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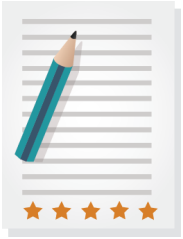
Updated 10/23/2024 v.20.1



NB100-77913

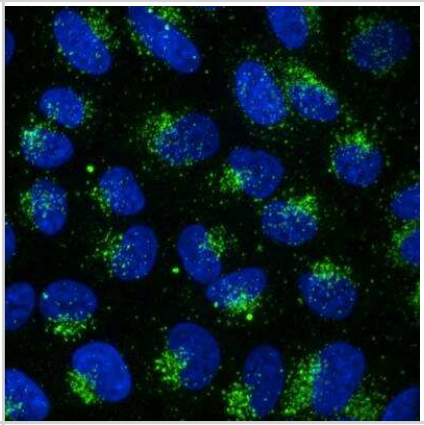
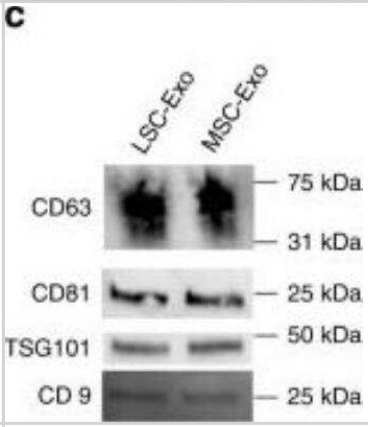
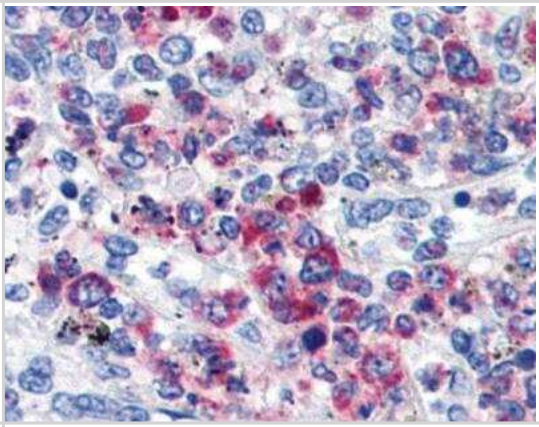
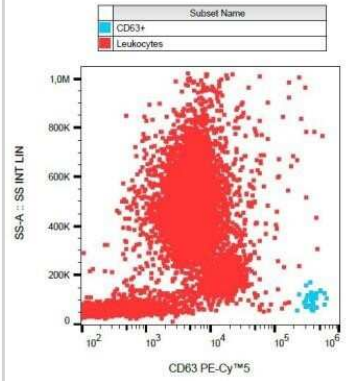
CD63 Antibody (MEM-259) - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Monoclonal
Clone	MEM-259
Preservative	0.9% Sodium Azide
Isotype	IgG1
Purity	Protein A purified
Buffer	PBS (pH 7.4)
Target Molecular Weight	60 kDa

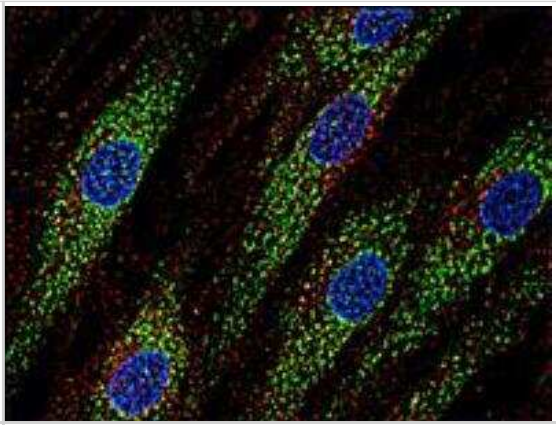
Product Description	
Host	Mouse
Gene ID	967
Gene Symbol	CD63
Species	Human, Mouse, Rat
Reactivity Notes	Use in Mouse and Rat reported in scientific literature (PMID:32111836).
Marker	Late Endosomes Marker
Specificity/Sensitivity	The antibody MEM-259 reacts with an extracellular/luminal epitope of CD63 (LAMP-3), a 40-60 kDa tetraspan glycoprotein expressed by granulocytes, platelets, T-cells, monocytes/macrophages and endothelial cells. Cell surface exposition of CD63 is usually activation-dependent.
Immunogen	HPB-ALL T cell line

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, CyTOF-ready
Recommended Dilutions	Western Blot 1:100 - 1:2000, Flow Cytometry 2 ug/ml, Immunohistochemistry 10 ug/mL, Immunocytochemistry/ Immunofluorescence 1:10 - 1:2000, Immunoprecipitation 1:10 - 1:500, Immunohistochemistry-Paraffin 10 ug/ml, CyTOF-ready
Application Notes	This antibody is CyTOF ready. WB reactivity reported in (PMID: 25034888). Clone MEM-259 has been used for extracellular vesicle flow cytometry

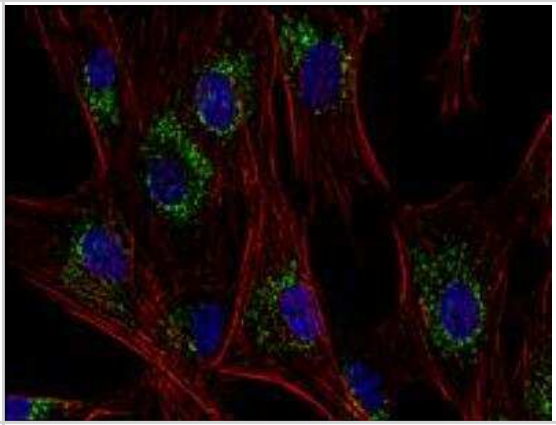
Images

Immunocytochemistry/Immunofluorescence: CD63 Antibody (MEM-259) [NB100-77913] - Human HeLa cells. ICC/IF image submitted by a verified customer review.	
Western Blot: CD63 Antibody (MEM-259) [NB100-77913] - Immunoblot analysis of CD63, CD81, TSG101, and CD9 protein in LSC-Exo and MSC-Exo. Image collected and cropped by CiteAb from the following publication (nature.com/articles/s41467-020-14344-7), licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: CD63 Antibody (MEM-259) [NB100-77913] - Staining of human spleen (paraffin sections) using anti-CD63 (MEM-259).	
Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Flow Cytometry: CD63 Antibody (MEM-259) [FITC] [NB500-483] - Analysis of IgE-activated peripheral blood stained with anti-human CD63 (MEM-259) PE-CyTM5. Image using the FITC form of this antibody.	

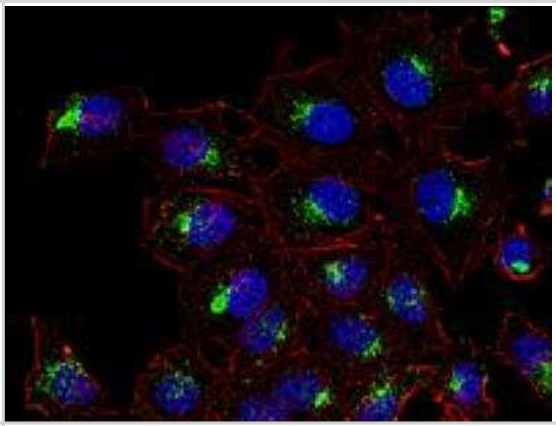
Immunocytochemistry/Immunofluorescence: CD63 Antibody (MEM-259) [NB100-77913] - Staining of human skin fibroblasts with anti-CD63 (MEM-259; green) after co-incubation of living cells with human Transferrin - Dyomics 547 (red); cell nuclei stained with DAPI (blue).



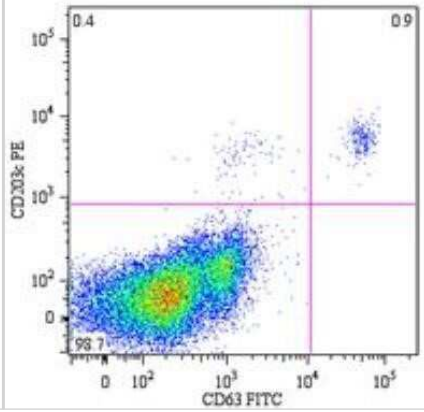
Immunocytochemistry/Immunofluorescence: CD63 Antibody (MEM-259) [NB100-77913] - Staining of CD63 in human primary fibroblasts using anti-CD63 (MEM-259; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).

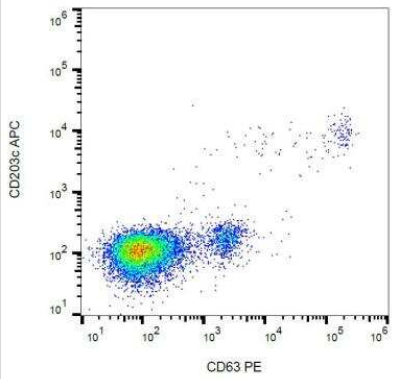
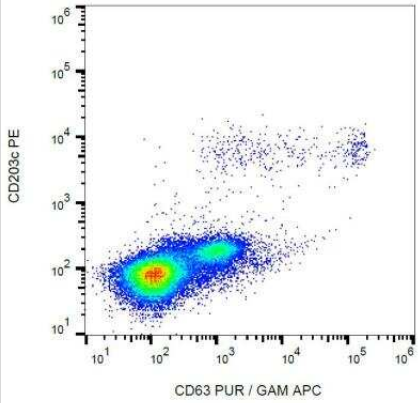
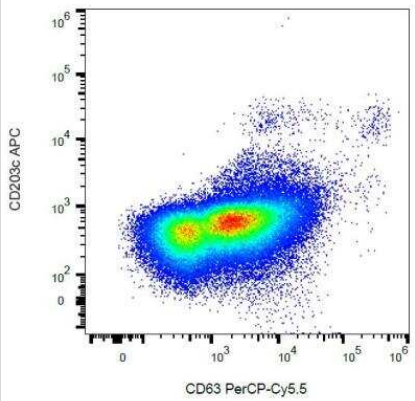
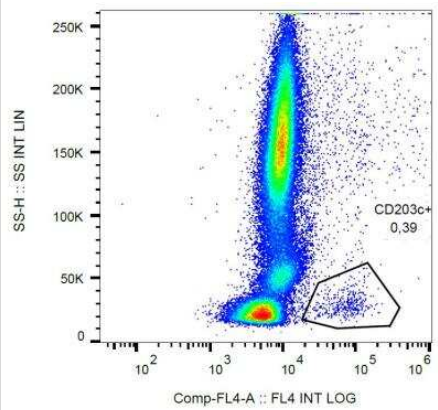


Immunocytochemistry/Immunofluorescence: CD63 Antibody (MEM-259) [NB100-77913] - Staining of CD63 in human HeLa cell line using anti-CD63 (MEM-259; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).

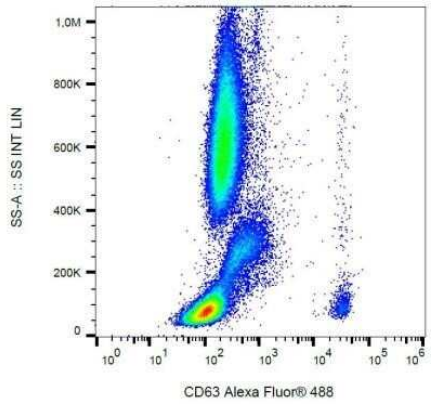


Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Analysis using the FITC conjugate of NB100-77913. Staining of peripheral blood lymphocytes from a patient with allergy to bee venom after stimulation with bee venom, stained with anti-human CD63 (MEM-259) FITC.

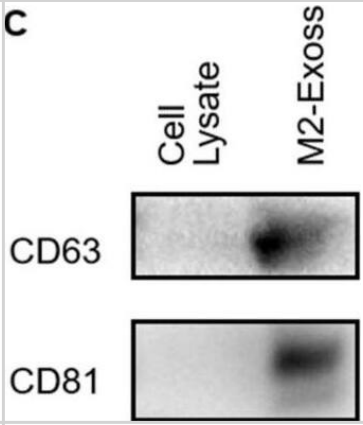


Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Analysis of IgE-activated peripheral blood stained with anti-human CD63 (MEM-259) PE.	
Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Analysis of IgE-activated peripheral blood stained with anti-human CD63 (MEM-259) purified, GAM-APC.	
Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Analysis of IgE-activated peripheral blood stained with anti-human CD63 (MEM-259) PerCP-CyTM5.5.	
Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Analysis of IgE-activated peripheral blood stained with anti-human CD63 (MEM-259) PerCP.	

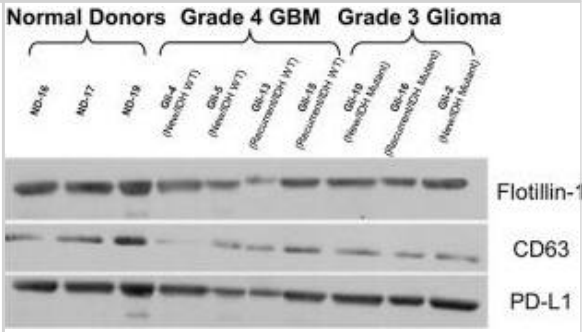
Flow Cytometry: CD63 Antibody (MEM-259) [NB100-77913] - Flow Cytometry: CD63 Antibody (MEM-259) [FITC] [NB500-483] - Analysis of IgE-activated peripheral blood stained with anti-human CD63 (MEM-259) Alexa Fluor® 488. Image using the FITC form of this antibody.



Characterization & internalization of M2-Exos. (A) TEM image of M2-Exos. Scale bar: 200 nm. (B) DLS measurement of M2-Exos size. (C) Western blotting assay of exosomal markers in THP-1-M2 cellular lysate & M2-Exos preparation. (D,F) Fluorescence images of 786-O & ACHN cells treated with or without PKH67-labeled M2-Exos (green). Scale bar: 50 μm. (E,G) Three-dimensional confocal reconstruction of 786-O & ACHN cells treated with PKH67-labeled M2-Exos (green). (H) Fluorescence staining analyzing the internalization of M2-Exos by 786-O cells over 12 h. Scale bar: 10 μm. CT: control. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/35328425), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: CD63 Antibody (MEM-259) - BSA Free [NB100-77913] - Cytokine & checkpoint molecule arrays from plasma exosomes showed a decreased concentration of IFN-γ, IL-10, IL-13, B7-1, B7-2, & ICOSL in GBM patients in comparison to normal donors. (A) Quantification of IFN-γ, IL-10, & IL-13 in plasma exosomes from normal donors & grade 4 GBM patients' plasma exosomes (mean ± SEM, n = 4/group, *P < 0.05). (B) Quantification of B7-1, B7-2, & ICOSL in plasma exosomes from normal donors & grade 4 GBM patients' plasma exosomes (mean ± SEM, n = 4/group). (C) Quantification of the immunosuppressive checkpoint & T cell costimulatory homolog protein PD-L1 in plasma exosomes from normal donors & grade 4 GBM patients' plasma exosomes (mean ± SEM, n = 4/group). Interestingly, PD-L1 is found at similar levels in both normal donor & glioma patient plasma exosomes & these findings were confirmed by western blot. Western Blot analysis also shows that exosomal markers Flotillin-1 & CD63 are found universally in plasma exosomes from normal donors (n = 3), glioblastoma (grade 4) patients (n = 4), & grade 3 glioma patients (n = 3), though CD63 expression may be slightly reduced in glioma patients. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31380286), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Xianhui Ruan, Wei Yan, Minghui Cao, Ray Anthony M. Daza, Miranda Y. Fong, Kaifu Yang, Jun Wu, Xuxiang Liu, Melanie Palomares, Xiwei Wu, Arthur Li, Yuan Chen, Rahul Jandial, Nicholas C. Spitzer, Robert F. Hevner, Shizhen Emily Wang Breast cancer cell-secreted miR-199b-5p hijacks neurometabolic coupling to promote brain metastasis Nature Communications 2024-05-29 [PMID: 38811525]

Supratik Das, Hilal Ahmad Parray, Adarsh Kumar Chiranjivi, Prince Kumar, Abhishek Goswami, Manish Bansal, Deepak Kumar Rathore, Rajesh Kumar, Sweety Samal Kennedy Epitope (KE)-dependent Retrograde Transport of Efficiently Cleaved HIV-1 Envelopes (Envs) and its Effect on Env Cell Surface Expression and Viral Particle Formation. The protein journal 2023-10-04 [PMID: 37794304]

Lee JY, Cho J, D'Egidio F et al. Probing Multiple Transplant Delivery Routes of CD+34 Stem Cells for Promoting Behavioral and Histological Benefits in Experimental Ischemic Stroke Stem cells translational medicine 2023-11-28 [PMID: 38016184] (IHC, Rat)

Henrich SE, McMahon KM, Plebanek MP et al. Prostate cancer extracellular vesicles mediate intercellular communication with bone marrow cells and promote metastasis in a cholesterol-dependent manner Journal of Extracellular Vesicles 2020-12-31 [PMID: 33408816] (Western Blot)

Ruan X, Cao M, Yan W et al. Cancer-cell-secreted extracellular vesicles target p53 to impair mitochondrial function in muscle EMBO reports 2023-07-13 [PMID: 37439436]

Das S, Parray H, Chiranjivi A et al. Kennedy epitope (KE)-dependent retrograde transport of efficiently cleaved HIV-1 envelopes (Envs) and its effect on Env cell surface expression and viral particle formation Research Square 2022-11-10 (WB, Human)

Carpenter MA, Ginugu M, Khan S, Kemp MG DNA containing cyclobutane pyrimidine dimers is released from UVB-irradiated keratinocytes in a caspase-dependent manner The Journal of investigative dermatology 2022-06-09 [PMID: 35691362]

Dinh PC, Paudel D, Brochu H et al. Inhalation of lung spheroid cell secretome and exosomes promotes lung repair in pulmonary fibrosis Nat Commun 4389-01-01 [PMID: 32111836] (WB, Human)

Zhang Z, Hu J, Ishihara M et al. The miRNA-21-5p Payload in Exosomes from M2 Macrophages Drives Tumor Cell Aggression via PTEN/Akt Signaling in Renal Cell Carcinoma International journal of molecular sciences 2022-03-10 [PMID: 35328425] (WB, Human)

Gustafson K, Huynh K, Heineck D et al. Automated fluorescence quantification of extracellular vesicles collected from blood plasma using dielectrophoresis Lab on a Chip 2021-03-24 [PMID: 33877235] (ICC/IF, Human)

Vickers K C, Palmisano B T et al. MicroRNAs are transported in plasma and delivered to recipient cells by high-density lipoproteins. Nat Cell Biol 2011-01-04 [PMID: 21423178] (WB, Human)

Cumba Garcia L, Peterson T, Cepeda M et al. Isolation and Analysis of Plasma-Derived Exosomes in Patients With Glioma Front. Oncol. 2019-07-16 [PMID: 31380286] (WB, Human)

More publications at http://www.novusbio.com/NB100-77913

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NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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