

# Product Datasheet

## CD63 Antibody (MX-49.129.5)

### NBP2-32830-0.1mg

Unit Size: 0.1 mg

Store at 4C.

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**NBP2-32830-0.1mg**

CD63 Antibody (MX-49.129.5)

Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	MX-49.129.5
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA

Product Description	
Description	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml. (NBP2-34689)  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80 C.
Host	Mouse
Gene ID	967
Gene Symbol	CD63
Species	Human, Mouse
Marker	Late Endosomes Marker
Specificity/Sensitivity	This monoclonal antibody recognizes protein of 26kDa-60kDa, which is identified as CD63. Its epitope is different from that of monoclonal antibody LAMP3/529. The tetraspanins are integral membrane proteins expressed on cell surface and granular membranes of hematopoietic cells and are components of multi-molecular complexes with specific integrins. The tetraspanin CD63 is a lysosomal membrane glycoprotein that translocates to the plasma membrane after platelet activation. CD63 is expressed on activated platelets, monocytes and macrophages, and is weakly expressed on granulocytes, T cell and B cells. It is located on the basophilic granule membranes and on the plasma membranes of lymphocytes and granulocytes. CD63 is a member of the TM4 superfamily of leukocyte glycoproteins that includes CD9, CD37 and CD53, which contain four transmembrane regions. CD63 may play a role in phagocytic and intracellular lysosome-phagosome fusion events. CD63 deficiency is associated with Hermansky-Pudlak syndrome and is strongly expressed during the early stages of melanoma progression.
Immunogen	Full length CD63 of human origin (Uniprot: P08962 )

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.5-1 ug/ml, Flow Cytometry 0.5-1 ug/million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 0.5-1 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml

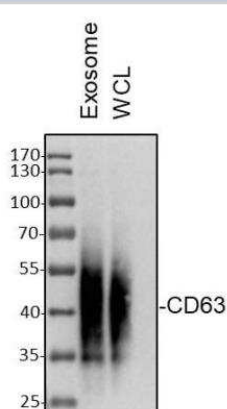


**Application Notes**

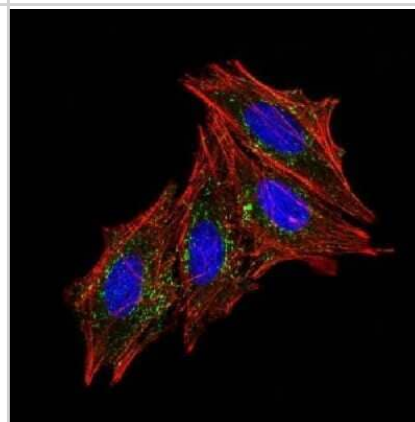
Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined.

**Images**

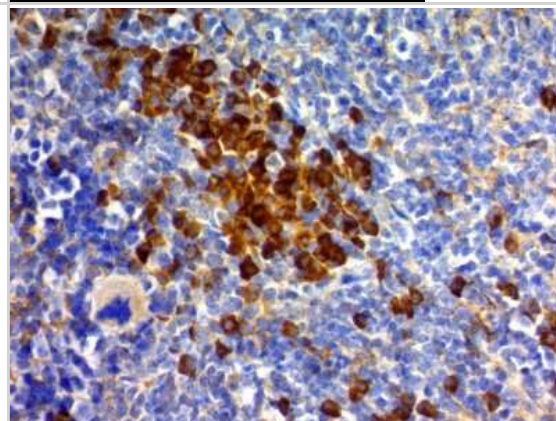
Western Blot: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Exosome or whole cell lysates (WCL) sample from MDA-MB-231 cells was loaded with 10 ug/lane. 10% SDS-PAGE. CD63 antibody (NBP2-32830) was used for primary antibody: 1:500, 4C, overnight. Image from verified customer review.



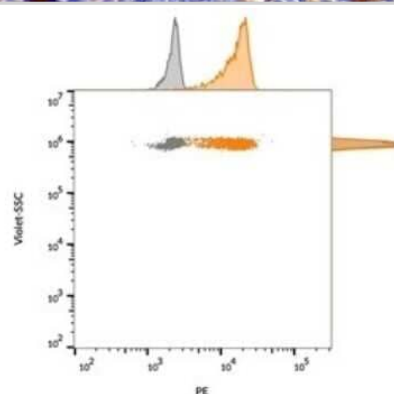
Immunocytochemistry/Immunofluorescence: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Immunofluorescence: - Azide and BSA Free [NBP2-34689] - IF staining of HeLa cells using AF488 labeled CD63 Monoclonal Antibody (MX-49.129.5) (green). F-actin filaments are labeled with dylight 554 phalloidin (red) Nuclei stained with DAPI (blue).



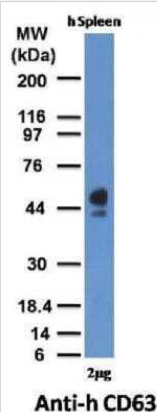
Immunohistochemistry-Paraffin: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Formalin-fixed, paraffin-embedded Mouse spleen stained with CD63 Antibody (MX-49.129.5)



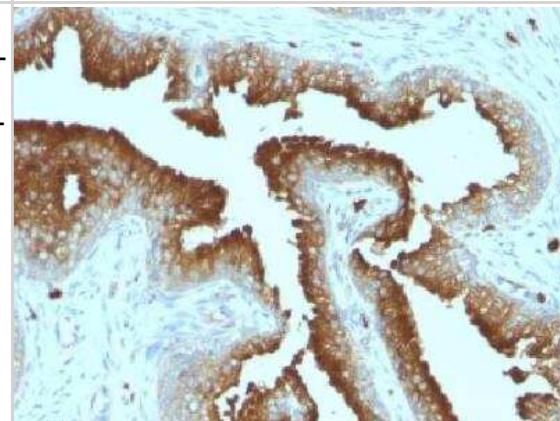
Flow Cytometry: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Flow cytometric analysis of bead-bound exosomes derived from MCF-7 cells. CD63 Mouse Monoclonal antibody (MX-49.129.5) followed by goat anti-mouse IgG-CF568 (orange); unstained exosomes (gray).



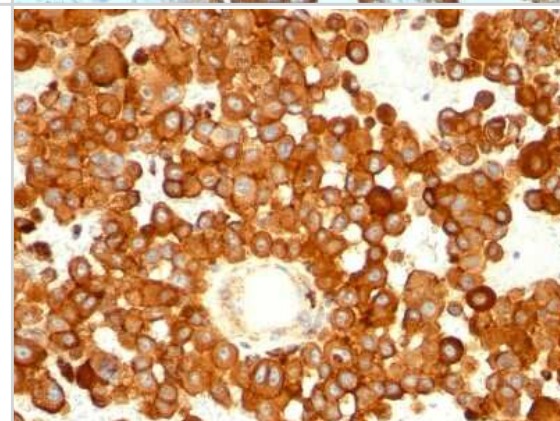
Western Blot: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Western Blot: CD63 Antibody (MX-49.129.5) - Azide and BSA Free [NBP2-34689] - Western blot of human spleen Lysate with CD63 Monoclonal Antibody (IMX-49.129.5)



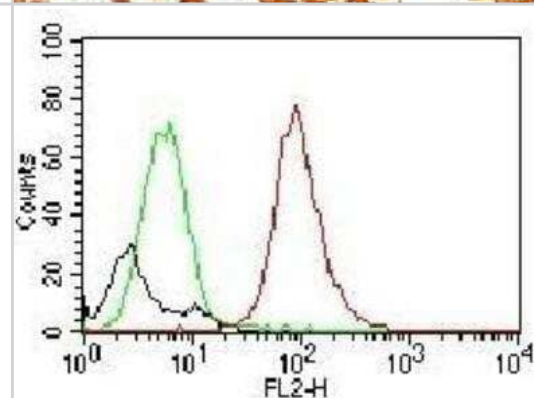
Immunohistochemistry-Paraffin: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Immunohistochemistry-Paraffin: CD63 Antibody (MX-49.129.5) - Azide and BSA Free [NBP2-34689] - Formalin-fixed, paraffin-embedded human prostate carcinoma stained with CD63 Monoclonal Antibody (MX-49.129.5)



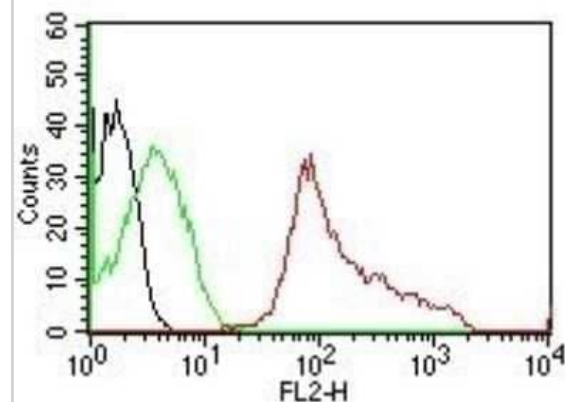
Immunohistochemistry-Paraffin: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Formalin-fixed, paraffin-embedded human melanoma stained with CD63 Antibody (MX-49.129.5)



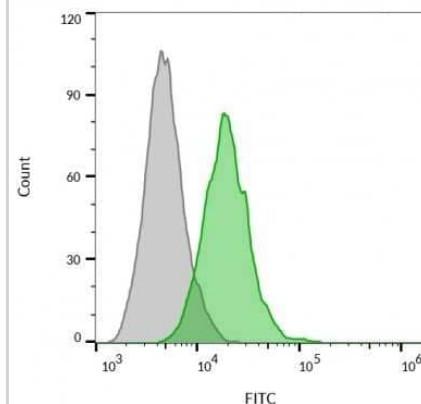
Flow Cytometry: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Flow Cytometry: CD63 Antibody (MX-49.129.5) - Azide and BSA Free [NBP2-34689] - Flow Cytometry of NIH/3T3 Cells. Black: Cells alone; Green: Isotype Control; Red; PE-labeled CD63 Monoclonal Antibody (MX-49.129.5)



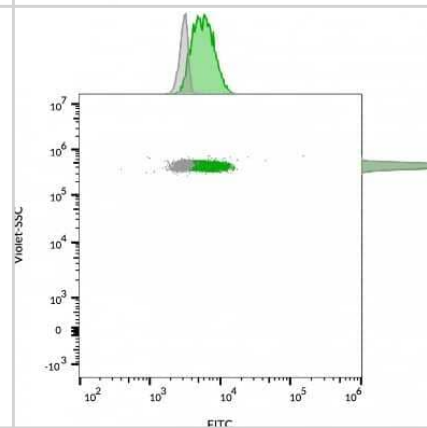
Flow Cytometry: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Flow Cytometric staining of CD63 on human PBMC cells. Black: cells alone; Green: Isotype Control; Red: PE-labeled CD63 Monoclonal Antibody (MX-49.129.5).



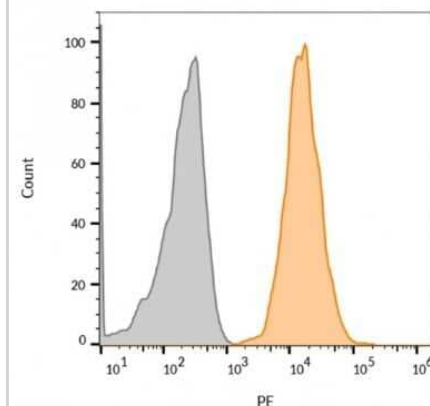
Flow Cytometry: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Flow cytometry of MCF-7 cells unstained (gray) or stained with CF488A-labeled CD63 monoclonal antibody (MX-49.129.5) (green).



Flow Cytometry: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Flow cytometry of bead-bound exosomes derived from MCF-7 cells. Unstained exosomes (gray) or stained with CF488A-labeled CD63 monoclonal antibody (MX-49.129.5) (green)



Flow Cytometry: CD63 Antibody (MX-49.129.5) [NBP2-32830] - Flow cytometric analysis of MCF-7 cells. CD63 Mouse Monoclonal antibody (MX-49.129.5) followed by goat anti-mouse IgG-CF568 (orange); unstained cells (gray).





## Publications

Yiwei Ai, Chenxu Guo, Marta Garcia-Contreras, Laura S. Sánchez B., Andras Saftics, Oluwapelumi Shodubi, Shankar Raghunandan, Junhao Xu, Shang Jui Tsai, Yi Dong, Rong Li, Tijana Jovanovic-Talisman, Stephen J. Gould  
Endocytosis blocks the vesicular secretion of exosome marker proteins *Science Advances* 2024-05-10 [PMID: 38718108]

Kammala AK, Mosebarger A, Radnaa E et al. Extracellular Vesicles-mediated recombinant IL-10 protects against ascending infection-associated preterm birth by reducing fetal inflammatory response *Frontiers in Immunology* 2023-08-04 [PMID: 37600782] (Western Blot)

Plebanek, MP;Xue, Y;Nguyen, YV;DeVito, NC;Wang, X;Holtzhausen, A;Beasley, GM;Yarla, N;Thievanthiran, B;Hanks, BA; A SREBF2-dependent gene program drives an immunotolerant dendritic cell population during cancer progression *bioRxiv : the preprint server for biology* 2023-04-28 [PMID: 37162965] (Immunohistochemistry-Paraffin, Mouse)

Guo C, Tsai SJ, Ai Y et al. The D614G mutation redirects SARS-CoV-2 spike to lysosomes and suppresses deleterious traits of the furin cleavage site insertion mutation *Science advances* 2022-12-23 [PMID: 36563151]

Hu G, Li G, Huang D et al. Renomedullary exosomes produce antihypertensive effects in reversible two-kidney one-clip renovascular hypertensive mice *Biochemical pharmacology* 2022-08-30 [PMID: 36055382] (IHC-P, Mouse)

Tantengco O, Richardson L, Radnaa E et al. Exosomes from *Ureaplasma parvum*-infected ectocervical epithelial cells promote feto-maternal interface inflammation but are insufficient to cause preterm delivery *Frontiers in Cell and Developmental Biology* 2022-08-15 [PMID: 36046342] (WB, Human)

Yuan, P; SOX10 downregulation in tumor cells affects extracellular vesicle production and function in the tumor microenvironment Thesis

Tsai SJ, Ai Y, Guo C, Gould SJ Degron-tagging of BleoR and other antibiotic-resistance genes selects for higher expression of linked transgenes and improved exosome engineering *The Journal of biological chemistry* 2022-03-18 [PMID: 35314197] (WB)

Tantengco OAG, Radnaa E, Shahin H et al. Cross talk: Trafficking and functional impact of maternal exosomes at the Feto-maternal Interface under normal and pathologic states *Biology of reproduction* 2021-09-23 [PMID: 34554204] (WB, Human)

Zou Y, Bhat Om, Yuan X Et Al. Release and Actions of Inflammatory Exosomes in Pulmonary Emphysema: Potential Therapeutic Target of Acupuncture *Journal of Inflammation Research* 2021-07-01 [PMID: 34335040] (IF/IHC)

Shahin HI, Radnaa E, Tantengco OAG et al. Microvesicles and Exosomes Released by Amnion Epithelial Cells Under Oxidative Stress Cause Inflammatory Changes in Uterine Cells *Biology of reproduction* 2021-05-07 [PMID: 33962471] (WB, Human)

Radnaa E, Richardson L, Sheller-Miller S et al. Extracellular vesicle mediated feto-maternal HMGB1 signaling induces preterm birth *Lab on a Chip* 2021-03-29 [PMID: 34008619]

More publications at <http://www.novusbio.com/NBP2-32830>



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### **Products Related to NBP2-32830-0.1mg**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
H00000967-G01-2ug	Recombinant Human CD63 Protein

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### **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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