# Product Datasheet

## CD63 Antibody (H5C6) - BSA Free
## NBP2-42225

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**Reviews: 5 Publications: 56**

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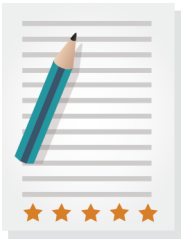
www.novusbio.com/NBP2-42225

Updated 12/20/2023 v.20.1





# NBP2-42225

CD63 Antibody (H5C6) - BSA Free

## Product Information

| | |
|---|---|
| **Unit Size** | 0.1 ml |
| **Concentration** | 1.0 mg/ml |
| **Storage** | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. |
| **Clonality** | Monoclonal |
| **Clone** | H5C6 |
| **Preservative** | 0.05% Sodium Azide |
| **Isotype** | IgG1 Kappa |
| **Purity** | Protein G purified |
| **Buffer** | PBS |

## Product Description

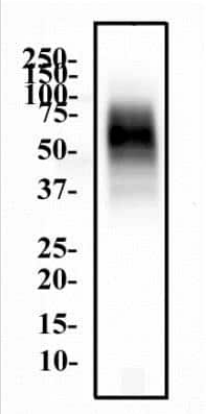
| | |
|---|---|
| **Host** | Mouse |
| **Gene ID** | 967 |
| **Gene Symbol** | CD63 |
| **Species** | Human, Canine |
| **Marker** | Exosome Marker |
| **Immunogen** | Human splenic adherent cells. |

## Product Application Details

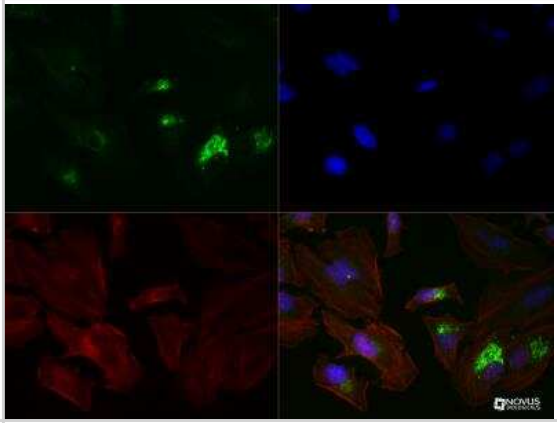
| | |
|---|---|
| **Applications** | Western Blot, Dot Blot, ELISA, Electron Microscopy, Flow Cytometry, Flow (Intracellular), Functional, Immunocytochemistry/ Immunofluorescence, In vitro assay, Immunoprecipitation, Block/Neutralize, Immunohistochemistry Whole-Mount |
| **Recommended Dilutions** | Western Blot, Flow Cytometry 1:1000, ELISA, Immunocytochemistry/ Immunofluorescence 1:50-1:100, Immunoprecipitation, Functional reported in scientific literature (PMID 9811687), In vitro assay reported in scientific literature (PMID 21464080), Dot Blot, Electron Microscopy reported in scientific literature (PMID 16735575), Flow (Intracellular), Immunohistochemistry Whole-Mount reported in scientific literature (PMID 21464080), Block/Neutralize reported in scientific literature (PMID 35602933) |

## Images

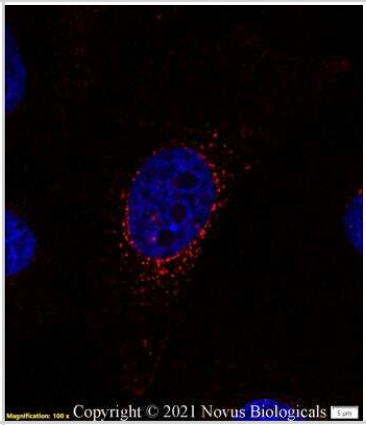
Western Blot: CD63 Antibody (H5C6) [NBP2-42225] - THP1 whole cell protein was separated by SDS-PAGE on a 12% gel and transferred to PVDF membrane. The membrane was probed with anti-CD63 antibody at 2 ug/mL and detected with an anti-mouse HRP secondary antibody using chemiluminescence.



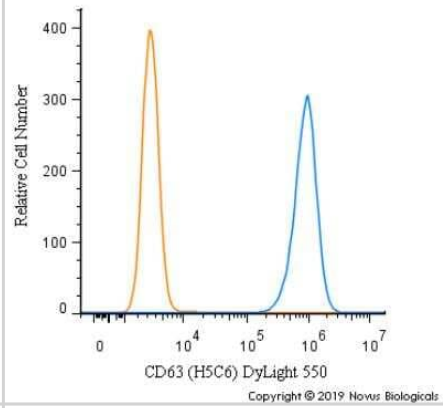
Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - The CD63 (H5C6) antibody was tested in HeLa cells at a 1:50 dilution against DyLight 488 (Green). Actin and nuclei were counterstained against Phalloidin 568 (Red) and DAPI (Blue), respectively.



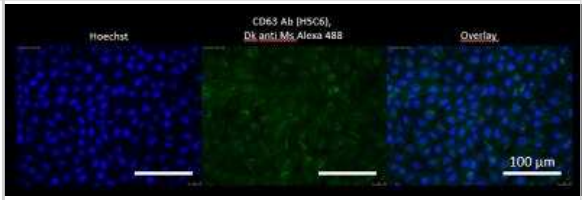
Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - HeLa cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-CD63 Antibody [H5C6] conjugated to DyLight 550 (NBP2-42225R) at 5 ug/ml for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



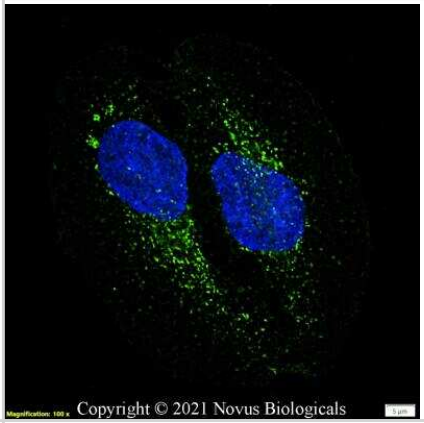

Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - An intracellular stain was performed on SK-MEL-28 cells with CD63 (H5C6) Antibody NBP2-42225R (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to DyLight 550.



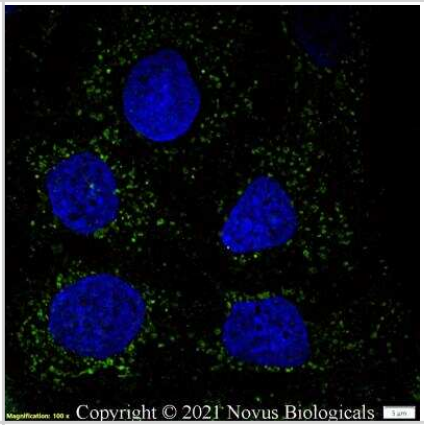

Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - MDCK cells stained with CD63 antibody at a dilution of 1:50 followed by Donkey anti-mouse secondary antibody conjugated with Alexa Fluor 488 (1:500). Nuclei were stained with Hoechst 33342. ICC/IF image submitted by a verified customer review.



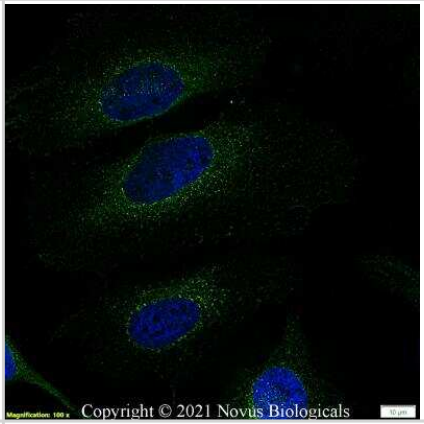
Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - U2OS cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-CD63 Antibody [H5C6] conjugated to Alexa Fluor 488 (NBP2-42225AF488) at 5 ug/ml for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



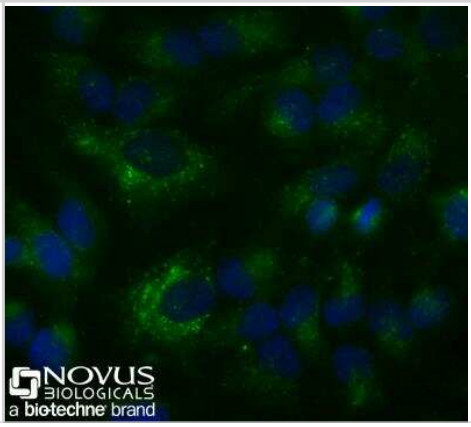

Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - A431 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-CD63 Antibody [H5C6] conjugated to Biotin (NBP2-42225B) at 5 ug/ml for 60 minutes at room temperature and detected with Streptavidin Protein conjugated to DyLight 488 at a 1:500 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



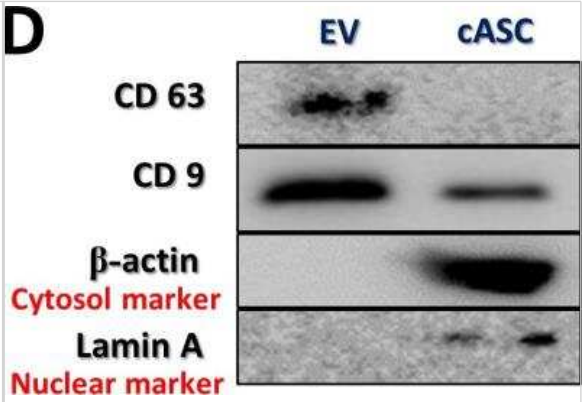

Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - HeLa cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-CD63 Antibody [H5C6] conjugated to Biotin (NBP2-42225B) at 5 ug/ml for 1 hour at room temperature and detected with Streptavidin conjugated to DyLight 488. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



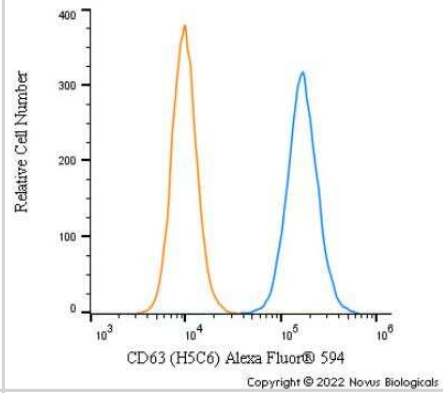

Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-CD63 [H5C6] conjugated to Alexa Fluor 488 [NBP2-42225AF488] at 10ug/mL for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



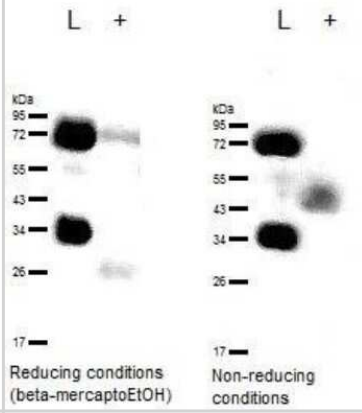
Western Blot: CD63 Antibody (H5C6) - BSA Free [NBP2-42225] - Analysis of common EV markers, where 10 ug of total protein was loaded in each lane. cASCs-EVs expressed CD63 and CD9, while beta actin and lamin A showed lower expression. The displayed data represent at least three repeated experiments with consistent results. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/32040478/) licensed under a CC-BY license.



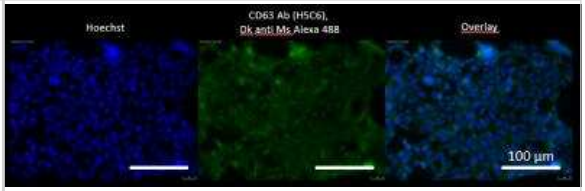

Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - An intracellular stain was performed on HeLa cells with CD63 [H5C6] Antibody NBP2-42225AF594 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 594.

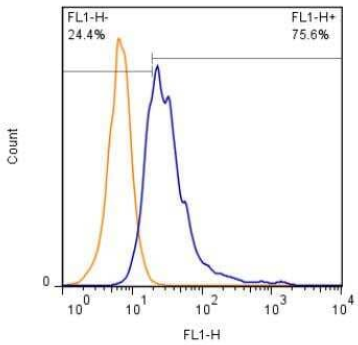
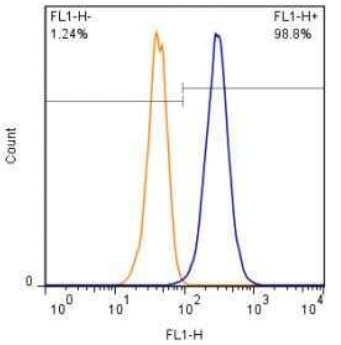
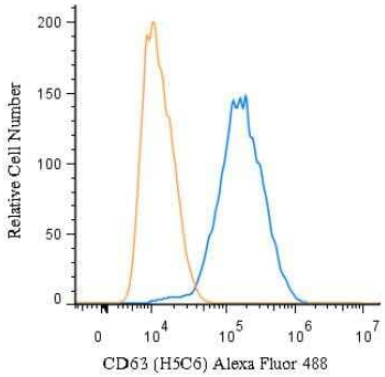
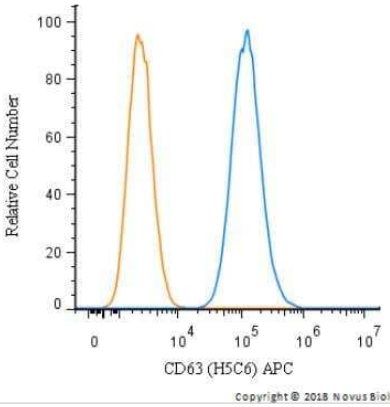


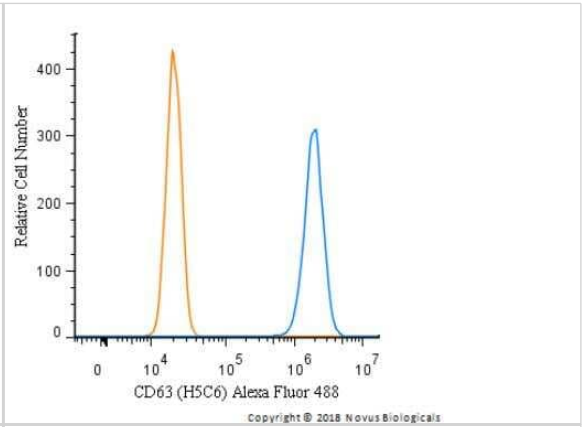
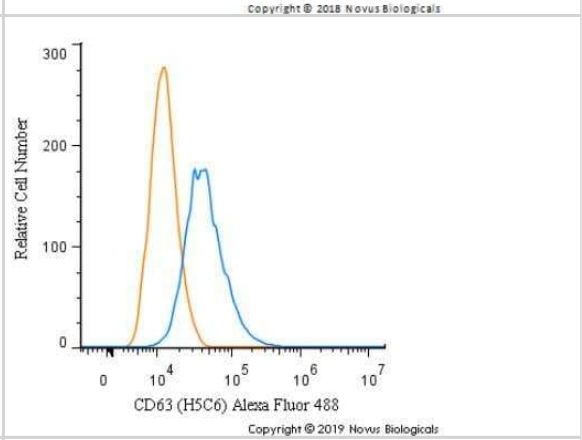
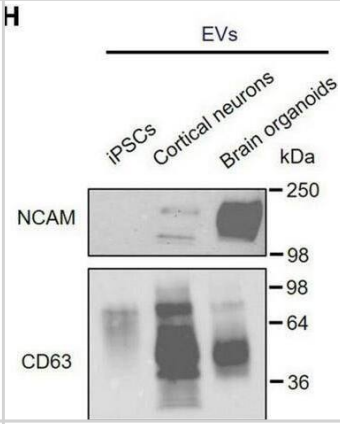
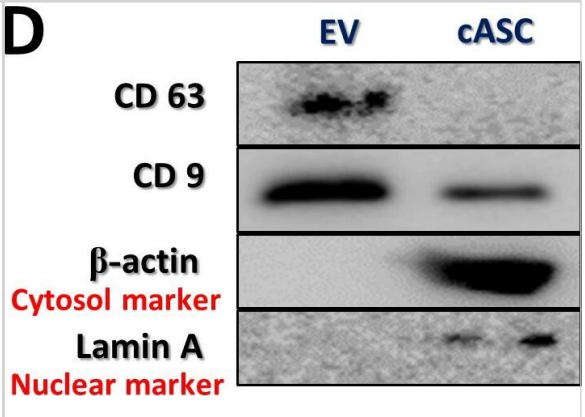

Western Blot: CD63 Antibody (H5C6) [NBP2-42225] - The same samples and volumes were run under reducing and non-reducing conditions. All procedures were performed in parallel for both conditions. L- ladder +- exosomes. Image visualized with HRP linked to secondary antibody. Western blot image submitted by a verified customer review.



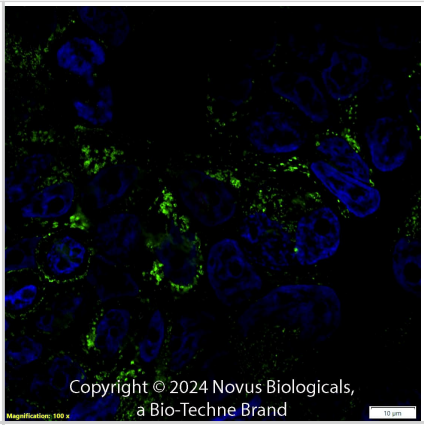

Immunocytochemistry/Immunofluorescence: CD63 Antibody (H5C6) [NBP2-42225] - HEK cells stained with CD63 antibody at a dilution of 1:50 followed by Donkey anti-mouse secondary antibody conjugated with Alexa Fluor 488 (1:500). Nuclei were stained with Hoechst 33342. ICC/IF image submitted by a verified customer review.



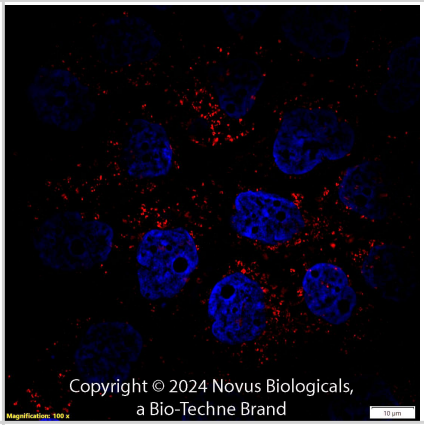
| | |
|---|---|
| Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - Human peripheral blood cells were stained (2 x 10^6 cells/mL) using the anti-CD63 antibody (Blue) at a dilution of 1:1000. Signal was detected using a Gt x Ms DyLight 488 Secondary and gated to the monocyte/granulocyte cell populations. Isotype was Mouse IgG1 kappa (orange). Data collected on BD FACS Calibur flow cytometer. |  |
| Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - A431 cells were stained (1 x10^6 cells/mL) using the anti-CD63 antibody at a 1:1000 dilution (blue). Signal was detected with Gt x Ms DyLight 488 secondary. Isotype control (orange). |  |
| Flow (Intracellular): CD63 Antibody (H5C6) [NBP2-42225] - An intracellular stain was performed on HepG2 cells with CD63 Antibody (H5C6) NBP2-42225AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 10 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488. |  |
| Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - An intracellular stain was performed on HeLa cells with CD63 Antibody (H5C6) NBP2-42225APC (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Allophycocyanin. |  |

| | |
|---|---|
| Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - An intracellular stain was performed on SK-MEL-28 cells with CD63 Antibody (H5C6) NBP2-42225AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488. |  |
| Flow Cytometry: CD63 Antibody (H5C6) [NBP2-42225] - An intracellular stain was performed on HeLa cells with CD63 [H5C6] Antibody NBP2-42225AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488. |  |
| NCAM as a neuronal exosome marker in plasma. (H) Western blot analysis of NCAM and CD63 from EVs released from iPSCs, iPSC-derived cortical neurons, and iPSC-derived brain organoids. EVs were isolated using SEC from the cell culture media of each sample, and equal EV particle numbers (6 x 108) were subject to immunoblotting with NCAM and CD63 antibodies. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/35655952), licensed under a CC-BY licence. |  |
| Characterization of cASC-EVs. (D) Immunoblotting analysis of common EV markers, where 10 ug of total protein was loaded in each lane. cASCs-EVs expressed CD63 and CD9, while beta actin and lamin A showed lower expression. The displayed data represent at least three repeated experiments with consistent results. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32040478), licensed under a CC-BY licence. |  |

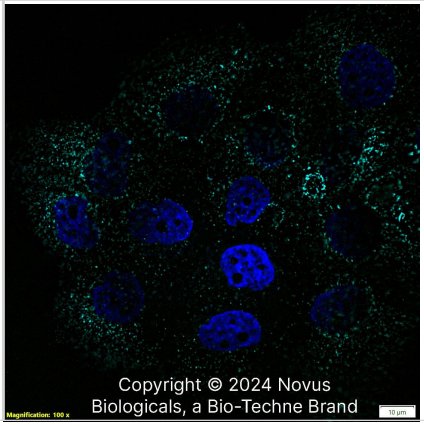
CD63 (H5C6) was detected in immersion fixed MCF7 human breast cancer cell line using Mouse anti-CD63 (H5C6) Protein G Purified Monoclonal Antibody conjugated to Alexa Fluor® 488 (Catalog # NBP2-42225AF488) (green) at 5 µg/mL overnight at 4C. Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.




CD63 (H5C6) was detected in immersion fixed A431 human skin carcinoma cell line using Mouse anti-CD63 (H5C6) Protein-G purified Monoclonal Antibody conjugated to DyLight 550 (Catalog # NBP2-42225R) (red) at 5 µg/mL overnight at 4C. Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.




CD63 (H5C6) was detected in immersion fixed A431 human skin carcinoma cell line using Mouse anti-CD63 (H5C6) Protein-G purified Monoclonal Antibody conjugated to Alexa Fluor® 647 (Catalog # NBP2-42225AF647) (light blue) at 2 µg/mL overnight at 4C. Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.



## Publications


Lucía Barrado-Gil, Isabel García-Dorival, Inmaculada Galindo, Covadonga Alonso, Miguel Ángel Cuesta-Geijo Insights into the function of ESCRT complex and LBPA in ASFV infection Frontiers in Cellular and Infection Microbiology 2023-12-06 [PMID: 38125905]

Ju□Hyun Bae, Chan□Hyeong Lee, Dokyung Jung, Kyungmoo Yea, Byoung□Joon Song, Hakho Lee, Moon□Chang Baek Extracellular vesicle isolation and counting system (EVics) based on simultaneous tandem tangential flow filtration and large field□of□view light scattering Journal of Extracellular Vesicles 2024-07-08 [PMID: 38978321]

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]

Matsui T, Sakamaki Y, Hiragi S, Fukuda M VAMP5 and distinct sets of cognate Q-SNAREs mediate exosome release Cell structure and function 2023-09-14 [PMID: 37704453]

Proestler E, Donzelli J, Nevermann S et al. The multiple functions of miR-574-5p in the neuroblastoma tumor microenvironment Frontiers in pharmacology 2023-09-04 [PMID: 37731742] (WB, Human)

Wang J, Trau M, Wuethrich A A Microfluidic SERS Assay to Characterize the Phenotypic Heterogeneity in Cancer-Derived Small Extracellular Vesicles Methods in molecular biology (Clifton, N.J.) 2023-06-10 [PMID: 37300621]

Saftics A, Abuelreich S, Romano E et al. Single Extracellular VEsicle Nanoscopy Journal of extracellular vesicles 2023-07-01 [PMID: 37422692] (DB, Human)

Details:
1:500 dilution

Del Rivero T, Milberg J, Bennett C et al. Human amniotic fluid derived extracellular vesicles attenuate T cell immune response Frontiers in immunology 2022-11-28 [PMID: 36518766] (ICC/IF, Human)

de la Cruz-Ojeda P, Schmid T, Boix L et al. miR-200c-3p, miR-222-5p, and miR-512-3p Constitute a Biomarker Signature of Sorafenib Effectiveness in Advanced Hepatocellular Carcinoma Cells 2022-08-28 [PMID: 36078082] (WB, Human)

Ali Moussa HY, Manaph N, Ali G et al. Single Extracellular Vesicle Analysis Using Flow Cytometry for Neurological Disorder Biomarkers Frontiers in integrative neuroscience 2022-05-17 [PMID: 35655952] (WB, Human)

Details:
Dilutions: 1:1000

Bernuz M, Pallares-Rusinol A, Rossi R et al. Magnetic Separation of Cell-Secreted Vesicles with Tailored Magnetic Particles and Downstream Applications Methods in molecular biology (Clifton, N.J.) 2023-05-04 [PMID: 37140802]

Lin W, Yuan L, Gao Z et al. An Integrated Sample-to-Answer SERS Platform for Multiplex Phenotyping of Extracellular Vesicles SSRN Electronic Journal 2023-01-28


More publications at http://www.novusbio.com/NBP2-42225

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General: novus@novusbio.com

## Products Related to NBP2-42225

| | |
|---|---|
| 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) |
| NBP2-42225AF488 | CD63 Antibody (H5C6) [Alexa Fluor® 488] |

### 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.

**For more information on our 100% guarantee, please visit www.novusbio.com/guarantee**

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