

CD63 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5333B

Specification

CD63 Antibody (C-term) - Product Information

Application	WB, IHC-P-Leica, FC,E
Primary Accession	P08962
Other Accession	NP_001771.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	163-190

CD63 Antibody (C-term) - Additional Information

Gene ID 967

Other Names

CD63 antigen, Granulophysin, Lysosomal-associated membrane protein 3, LAMP-3, Melanoma-associated antigen ME491, OMA81H, Ocular melanoma-associated antigen, Tetraspanin-30, Tspan-30, CD63, CD63, MLA1, TSPAN30

Target/Specificity

This CD63 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 163-190 amino acids from the C-terminal region of human CD63.

Dilution

WB~~1:1000
IHC-P-Leica~~1:500
FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD63 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD63 Antibody (C-term) - Protein Information

Name CD63

Synonyms MLA1, TSPAN30

Function Functions as a cell surface receptor for TIMP1 and plays a role in the activation of cellular signaling cascades. Plays a role in the activation of ITGB1 and integrin signaling, leading to the activation of AKT, FAK/PTK2 and MAP kinases. Promotes cell survival, reorganization of the actin cytoskeleton, cell adhesion, spreading and migration, via its role in the activation of AKT and FAK/PTK2. Plays a role in VEGFA signaling via its role in regulating the internalization of KDR/VEGFR2. Plays a role in intracellular vesicular transport processes, and is required for normal trafficking of the PMEL luminal domain that is essential for the development and maturation of melanocytes. Plays a role in the adhesion of leukocytes onto endothelial cells via its role in the regulation of SELP trafficking. May play a role in mast cell degranulation in response to Ms4a2/FceRI stimulation, but not in mast cell degranulation in response to other stimuli.

Cellular Location

Cell membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Endosome, multivesicular body. Melanosome. Secreted, extracellular exosome. Cell surface. Note=Also found in Weibel-Palade bodies of endothelial cells (PubMed:10793155). Located in platelet dense granules (PubMed:7682577). Detected in a subset of pre-melanosomes Detected on intraluminal vesicles (ILVs) within multivesicular bodies (PubMed:21962903).

Tissue Location

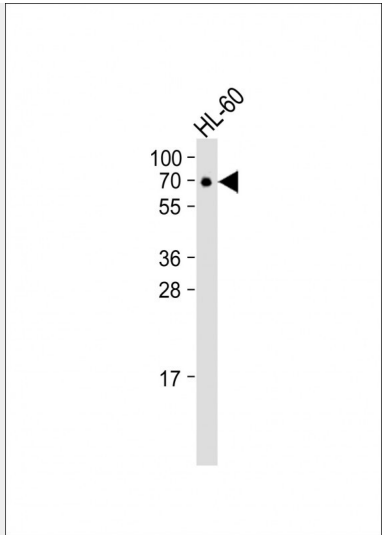
Detected in platelets (at protein level). Dysplastic nevi, radial growth phase primary melanomas, hematopoietic cells, tissue macrophages.

CD63 Antibody (C-term) - Protocols

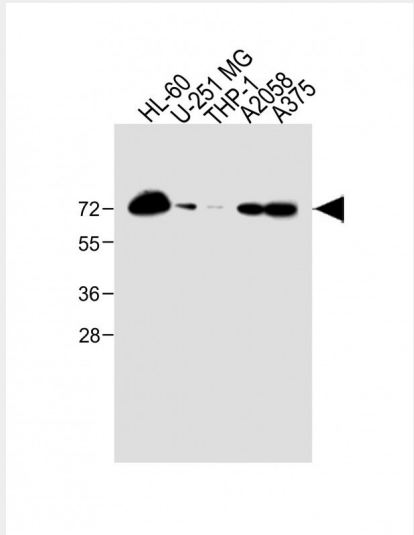
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

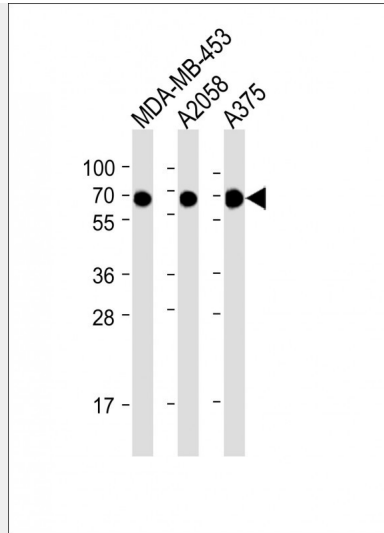
CD63 Antibody (C-term) - Images



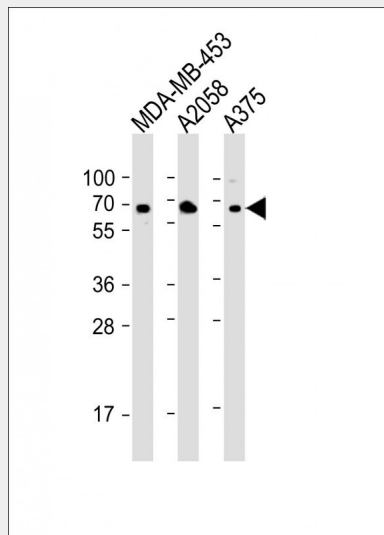
Anti-CD63 Antibody (C-term) at 1:1000 dilution + HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40-50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



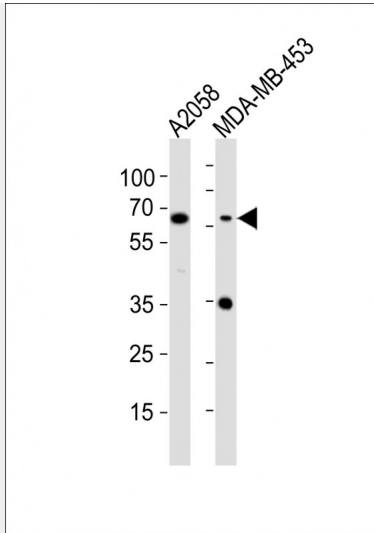
All lanes : Anti-CD63 Antibody (C-term) at 1:2000 dilution Lane 1: HL-60 whole cell lysate Lane 2: U-251 MG whole cell lysate Lane 3: THP-1 whole cell lysate Lane 4: A2058 whole cell lysate Lane 5: A375 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40-50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



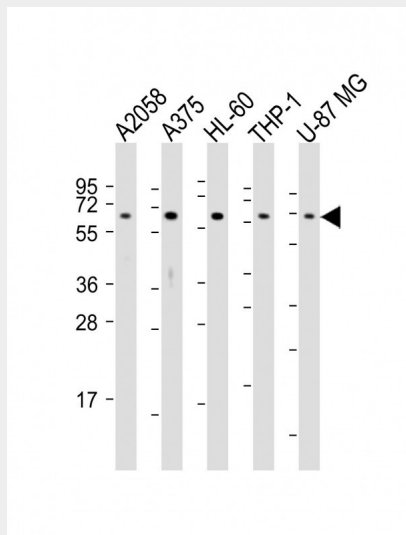
All lanes : Anti-CD63 Antibody (C-term) at 1:2000 dilution Lane 1: MDA-MB-453 whole cell lysate
 Lane 2: A2058 whole cell lysate Lane 3: A375 whole cell lysate Lysates/proteins at 20 µg per lane.
 Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40-50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



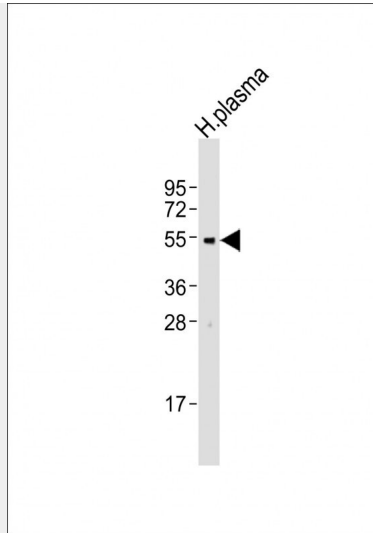
All lanes : Anti-CD63 Antibody (C-term) at 1:2000 dilution Lane 1: MDA-MB-453 whole cell lysate
 Lane 2: A2058 whole cell lysate Lane 3: A375 whole cell lysate Lysates/proteins at 20 µg per lane.
 Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40-50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



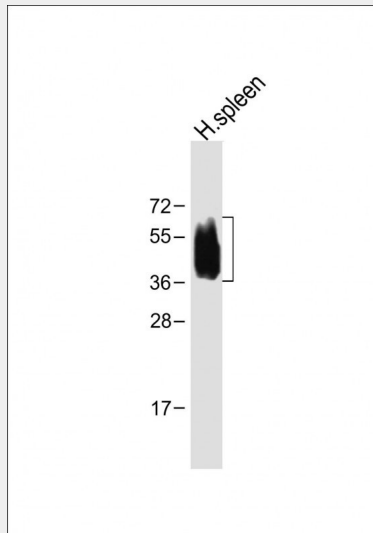
All lanes : Anti-CD63 Antibody (C-term) at 1:1000 dilution Lane 1: A2058 whole cell lysates Lane 2: MDA-MB-453 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



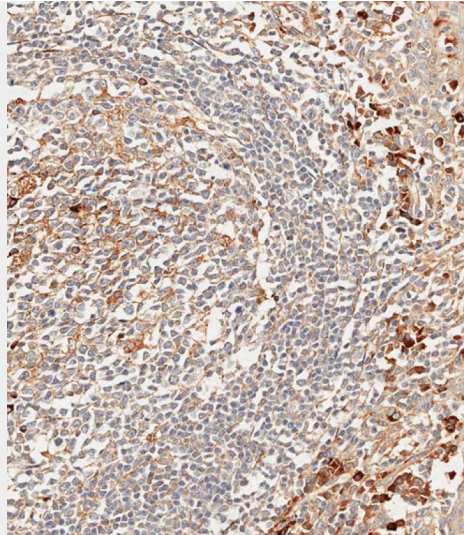
All lanes : Anti-CD63 Antibody (C-term) at 1:2000 dilution Lane 1: A2058 whole cell lysates Lane 2: A375 whole cell lysates Lane 3: HL-60 whole cell lysates Lane 4: THP-1 whole cell lysates Lane 5: U-87 MG whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



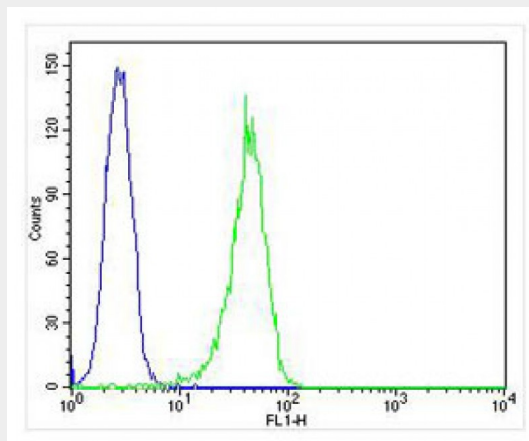
Anti-CD63 Antibody (C-term) at 1:2000 dilution + human plasma lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



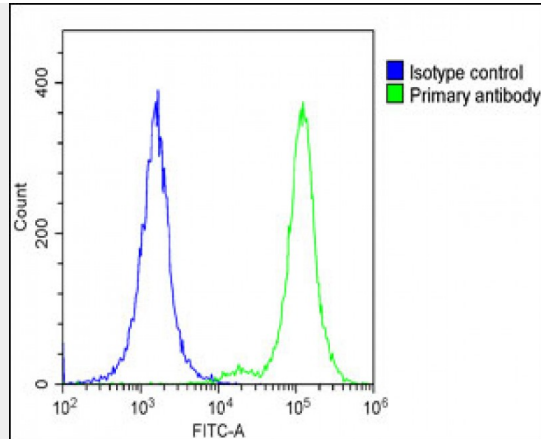
Anti-CD63 Antibody (C-term) at 1:1000 dilution + Human spleen lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using AP5333b performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing HL-60 cells stained with AP5333b (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP5333b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (1583138) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Overlay histogram showing HL-60 cells stained with AP5333b (green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

CD63 Antibody (C-term) - Background

CD63 is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein is a cell surface glycoprotein that is known to complex with integrins. It may function as a blood platelet activation marker. Deficiency of this protein is associated with Hermansky-Pudlak syndrome. Also this gene has been associated with tumor progression. The use of alternate polyadenylation sites has been found for this gene.

CD63 Antibody (C-term) - References

Weng, J., et al. *J. Virol.* 83(15):7467-7474(2009)
 Kassahn, D., et al. *Cell Death Differ.* 16(1):115-124(2009)
 Logozzi, M., et al. *PLoS ONE* 4 (4), E5219 (2009)

CD63 Antibody (C-term) - Citations

- [Exosomal miR-1246 and miR-155 as predictive and prognostic biomarkers for trastuzumab-based therapy resistance in HER2-positive breast cancer.](#)
- [Vps4A mediates the localization and exosome release of β-catenin to inhibit epithelial-mesenchymal transition in hepatocellular carcinoma.](#)
- [Aspirin inhibits hypoxia-mediated lung cancer cell stemness and exosome function.](#)
- [Specific microRNA signatures in exosomes of triple-negative and HER2-positive breast cancer patients undergoing neoadjuvant therapy within the GeparSixto trial.](#)
- [Different signatures of miR-16, miR-30b and miR-93 in exosomes from breast cancer and DCIS patients.](#)
- [Exosomal microRNAs as tumor markers in epithelial ovarian cancer.](#)
- [Diagnostic and prognostic relevance of circulating exosomal miR-373, miR-200a, miR-200b and miR-200c in patients with epithelial ovarian cancer.](#)
- [Therapeutic potential of human adipose-derived stem cells \(ADSCs\) from cancer patients: a pilot study.](#)