

# CD63 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5333B

### **Product Information**

Application	WB, FC, IHC-P-Leica, E
Primary Accession	<u>P08962</u>
Other Accession	<u>NP_001771.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	25637
Antigen Region	163-190

#### **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 FC~~1:10~50 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

#### **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 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 intralumenal 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.

## 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.

## 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)

#### Images



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.

# Citations

- <u>A Novel Urine Exosomal IncRNA Assay to Improve the Detection of Prostate Cancer at Initial Biopsy: A Retrospective</u> <u>Multicenter Diagnostic Feasibility Study</u>
- <u>Diagnostic and Prognostic Value of miR-16, miR-146a, miR-192 and miR-221 in Exosomes of Hepatocellular Carcinoma</u> and Liver Cirrhosis Patients
- 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.