

### CD63 (Late Endosomes Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone NKI/C3 + LAMP3/968 ] Catalog # AH12788

## **Specification**

## CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - Product Information

Application IHC, IF, FC
Primary Accession P08962
Other Accession 967, 445570
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse / IgG's

Calculated MW 26kDa (core protein); 30-60kDa

(glycosylated) KDa

## CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - 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

## **Application Note**

<span class ="dilution\_IHC">IHC~~1:100~500</span><br \> <span class
="dilution IF">IF~~1:50~200</span><br \> <span class = "dilution FC">FC~~1:10~50</span>

### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

CD63 (Late Endosomes Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

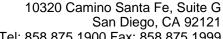
## CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - Protein Information

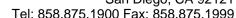
## Name CD63

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 intralumenal vesicles (ILVs) within multivesicular bodies (PubMed:21962903).

### **Tissue Location**

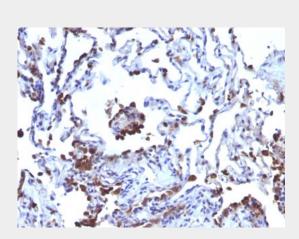
Detected in platelets (at protein level). Dysplastic nevi, radial growth phase primary melanomas, hematopoietic cells, tissue macrophages.

## CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - Protocols

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

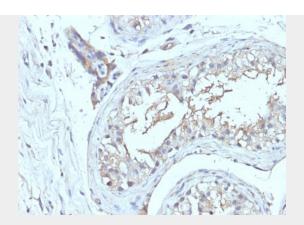
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cvtometv
- Cell Culture

### CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - Images

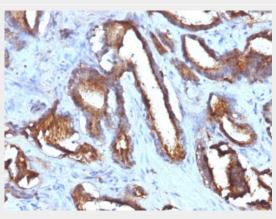


Formalin-fixed, paraffin-embedded human Melanoma metastasized to Lung stained with CD63 Monoclonal Antibody (NKI/C3 + LAMP3/968)





Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with CD63 Monoclonal Antibody (NKI/C3 + LAMP3/968)



Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with CD63 Monoclonal Antibody (NKI/C3 + LAMP3/968)

## CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - Background

This MAb recognizes protein of 26kDa-60kDa, which is identified as CD63. 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.

# CD63 (Late Endosomes Marker) Antibody - With BSA and Azide - References

Duffield, A., et al. 2003. The tetraspanin CD63 enhances the internalization of the H/K-ATPase  $\beta$  subunit. Proc. Natl. Acad. Sci. USA 100: 15560-15565