10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD63 (Late Endosomes Marker) Antibody

Mouse Monoclonal Antibody [Clone NKI/C3]
Catalog # AH12777

Product Information

Application	IF, FC
Primary Accession	P08962
Other Accession	967, 445570
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	NKI/C3
Calculated MW	25637

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	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD63 (Late Endosomes Marker) Antibody 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 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.

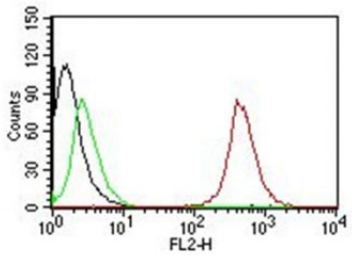
Background

This MAb recognizes protein of 26kDa-60kDa, which is identified as CD63. Its epitope is different from that of MAb 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.

References

C. Vennegoor et al., Int. J. Cancer 35: 287-295, 1985. | AA Palmer et al., Pathology 17: 335-339, 1985. | EC Hagen et al., Histopathology 10: 689-700, 1986

Images



Flow Cytometry of human CD63 on MCF-7 Cells. Black: Cells alone; Green: Isotype Control; Red: PE-labeled CD63 Monoclonal Antibody (NKI/C3).

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