

Anti-human CD63 antibody

Purified Mouse Monoclonal Antibody Catalog # ABV11681

Specification

Anti-human CD63 antibody - Product Information

Application WB, IHC-P, IHC-F, FC, E, IP

Primary Accession
Reactivity
Host
Clonality
Monoclonal
Isotype
Calculated MW
P08962
Human
Mouse
Mouse
Mouse
Mouse IgG1

Anti-human CD63 antibody - 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

CD63 (unconjugated)

Formulation

1 mg/ml in phosphate buffered saline (PBS) with sodium azide (15 mM), Approx. pH: 7.4.

Handling

The antibody solution should be gently mixed before use

Background Descriptions

Precautions

Anti-human CD63 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-human CD63 antibody - 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

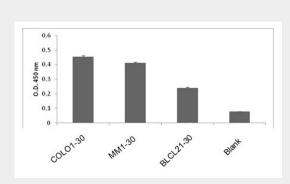
Detected in platelets (at protein level). Dysplastic nevi, radial growth phase primary melanomas, hematopoietic cells, tissue macrophages.

Anti-human CD63 antibody - Protocols

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

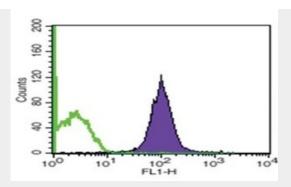
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-human CD63 antibody - Images



CD63 detection in purified exosomes from cell supernatants (COLO1-30, MM1-30, BLCL21-30).





CD63 staining of human plasma purified exosomes.

Anti-human CD63 antibody - Background

Anti-CD63 recognizes an extracellular fragment of CD63, a 56-kilodalton (kDa), type III lysosomal glycoprotein, belonging to the tetraspanin family. CD63 is expressed by granulocytes, platelets, T-cells, monocytes/macrophages, endothelial cells. CD63 protein is also expressed in exosome membrane. Cell sur-face exposition of CD63 is usually activation dependent. CD63 interacts with integrins and affects phagocytosis and cell migration, it is also involved in H/K ATPase trafficking regulation of ROMK1 channels. CD63 also serves as a T-cell co-stimulator molecule. Expression of CD63 can be used for predicting the prognosis in earlier stages of carcinomas.