

Monoclonal Antibody to CD63 - FITC

Alternate names:	Granulophysin, ME491, MLA1, Melanoma-associated antigen ME491, OMA81H, Ocular melanoma-associated antigen, TSPAN30, Tetraspanin-30
Catalog No.:	SM3035F
Quantity:	100 Tests
Background:	CD63 (LAMP-3, lysosome-associated membrane protein-3), a glycoprotein of tetraspanin family, is present in late endosomes, lysosomes and secretory vesicles of various cell types. It is also present in the plasma membrane, usually following cell activation. Hence, it has become a widely used basophil activation marker. In mast cells, however, CD63 exposition does not need their activation. 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 costimulation molecule. Expression of CD63 can be used for predicting the prognosis in earlier stages of carcinomas.
Uniprot ID:	P08962
NCBI:	NP_001771.1
GeneID:	967
Host / Isotype:	Mouse / IgG1
Clone:	MEM-259
Immunogen:	HPB-ALL T cell line
Format:	State: Liquid purified Ig fraction Buffer System: Phosphate Buffered Saline (PBS) Preservatives: 15 mM Sodium Azide Stabilizers: 0.2% (w/v) high-grade protease free BSA Label: FITC – Fluorescein Isothiocyanate. The reagent is free of unconjugated and adjusted for direct use
Applications:	Flow Cytometry analysis of Human blood cells using 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts with CD63 (LAMP-3), a 40-60 kDa tetraspan glycoprotein expressed by granulocytes, platelets, T cells, monocytes/macrophages and endothelial cells. Cell surface exposition of CD63 is usually activation-dependent.
Species Reactivity:	Tested: Human.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
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Storage:

Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General References:

1. Grützkau A, Smorodchenko A, Lippert U, Kirchhof L, Artuc M, Henz BM: LAMP-1 and LAMP-2, but not LAMP-3, are reliable markers for activation-induced secretion of human mast cells. *Cytometry A*. 2004 Sep;61(1):62-8.
2. Mantegazza AR, Barrio MM, Moutel S, Bover L, Weck M, Brossart P, Teillaud JL, Mordoh J: CD63 tetraspanin slows down cell migration and translocates to the endosomal-lysosomal-MIICs route after extracellular stimuli in human immature dendritic cells. *Blood*. 2004 Aug 15;104(4):1183-90.
3. Pfistershammer K, Majdic O, Stöckl J, Zlabinger G, Kirchberger S, Steinberger P, Knapp W: CD63 as an activation-linked T cell costimulatory element. *J Immunol*. 2004 Nov 15;173(10):6000-8.
4. Israels SJ, McMillan-Ward EM: CD63 modulates spreading and tyrosine phosphorylation of platelets on immobilized fibrinogen. *Thromb Haemost*. 2005 Feb;93(2):311-8.
5. Kwon MS, Shin SH, Yim SH, Lee KY, Kang HM, Kim TM, Chung YJ: CD63 as a biomarker for predicting the clinical outcomes in adenocarcinoma of lung. *Lung Cancer*. 2007 Jul;57(1):46-53.
6. Lin D, Kamsteeg EJ, Zhang Y, Jin Y, Sterling H, Yue P, Roos M, Duffield A, Spencer J, Caplan M, Wang WH: Expression of tetraspan protein CD63 activates protein tyrosine kinase (PTK) and enhances the PTK-induced inhibition of ROMK channels. *J Biol Chem*. 2008 Jan 22
7. Cerny J, Feng Y, Yu A, Miyake K, Borgonovo B, Klumperman J, Meldolesi J, McNeil PL, Kirchhausen T.: The small chemical vacuolin-1 inhibits Ca(2+)-dependent lysosomal exocytosis but not cell resealing. *EMBO Rep*. 2004 Sep;5 (9):883-8. Erratum in: *EMBO Rep*. 2005 Sep;6(9):898.

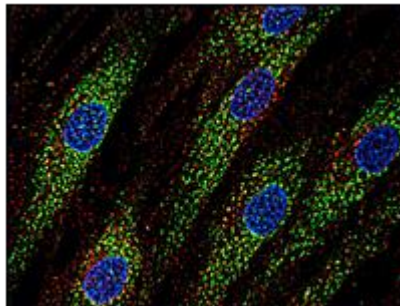
Pictures:

Fig. 1.

Immunofluorescence staining of human skin fibroblasts with anti-CD63 (MEM-259; green) after co-incubation of living cells with human Transferrin - Dyomics 547 (red); cell nuclei stained with DAPI (blue).

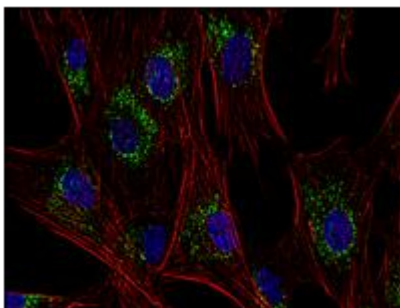


Fig. 2.

Immunofluorescence staining of CD63 in human primary fibroblasts using anti-CD63 (MEM-259; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).

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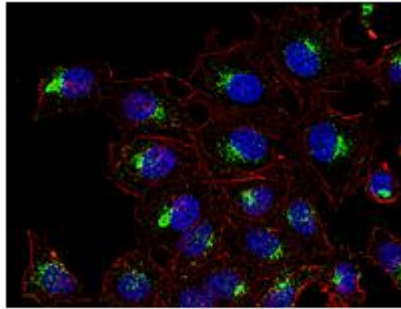


Fig. 3.

Immunofluorescence staining of CD63 in human HeLa cell line using anti-CD63 (MEM-259; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).

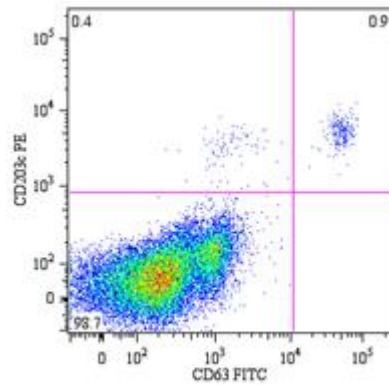


Fig. 4.

Flow cytometry analysis of peripheral blood lymphocytes from a patient with allergy to bee venom after stimulation with bee venom, stained with anti-human CD63 (MEM-259) FITC.

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