

CD63 (H-193): sc-15363

BACKGROUND

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 (also known as LAMP-3, melanoma-associated antigen ME491, TSPAN30, MLA1 and OMA81H) 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.

CHROMOSOMAL LOCATION

Genetic locus: CD63 (human) mapping to 12q13.2; Cd63 (mouse) mapping to 10 D3.

SOURCE

CD63 (H-193) is a rabbit polyclonal antibody raised against amino acids 45-238 mapping at the C-terminus of CD63 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CD63 (H-193) is recommended for detection of CD63 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CD63 (H-193) is also recommended for detection of CD63 in additional species, including canine and porcine.

Suitable for use as control antibody for CD63 siRNA (h): sc-29391, CD63 siRNA (m): sc-35792, CD63 shRNA Plasmid (h): sc-29391-SH, CD63 shRNA Plasmid (m): sc-35792-SH, CD63 shRNA (h) Lentiviral Particles: sc-29391-V and CD63 shRNA (m) Lentiviral Particles: sc-35792-V.

Molecular Weight of CD63 core protein: 26 kDa.

Molecular Weight of glycosylated CD63: 30-60 kDa.

Positive Controls: C32 whole cell lysate: sc-2205, T24 cell lysate: sc-2292 or SK-MEL-28 cell lysate: sc-2236.

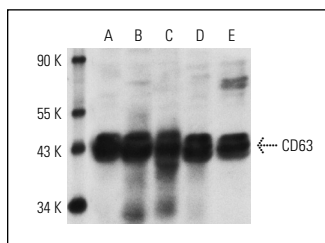
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

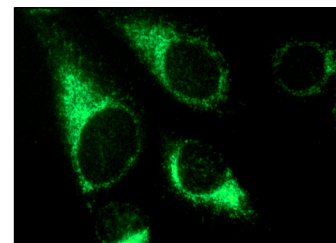
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



CD63 (H-193): sc-15363. Western blot analysis of CD63 expression in T24 (A), SK-MEL-28 (B), CCD-1064Sk (C), C32 (D) and THP-1 (E) whole cell lysates.



CD63 (H-193): sc-15363. Immunofluorescence staining of methanol-fixed C32 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Cho, J.A., et al. 2005. Exosomes: a new delivery system for tumor antigens in cancer immunotherapy. *Int. J. Cancer* 114: 613-622.
2. Liu, Y., et al. 2009. COP9-associated CSN5 regulates exosomal protein deubiquitination and sorting. *Am. J. Pathol.* 174: 1415-1425.
3. Guo, X., et al. 2009. Involvement of vps33a in the fusion of uroplakin-degrading multivesicular bodies with lysosomes. *Traffic* 10: 1350-1361.
4. Hatch, S.C., et al. 2009. Glycosphingolipid composition of human immunodeficiency virus type 1 (HIV-1) particles is a crucial determinant for dendritic cell-mediated HIV-1 *trans*-infection. *J. Virol.* 83: 3496-3506.
5. Barreto, A., et al. 2010. Membrane vesicles released by intestinal epithelial cells infected with rotavirus inhibit T cell function. *Viral Immunol.* 23: 595-608.
6. Lenassi, M., et al. 2010. HIV Nef is secreted in exosomes and triggers apoptosis in bystander CD4⁺ T cells. *Traffic* 11: 110-122.
7. Peng, S., et al. 2011. Genome-wide studies reveal that Lin28 enhances the translation of genes important for growth and survival of human embryonic stem cells. *Stem Cells* 29: 496-504.
8. Ogawa, Y., et al. 2011. Proteomic analysis of two types of exosomes in human whole saliva. *Biol. Pharm. Bull.* 34: 13-23.
9. Fabbri, M., et al. 2012. MicroRNAs bind to Toll-like receptors to induce prometastatic inflammatory response. *Proc. Natl. Acad. Sci. USA* 109: E2110-E2116.



Try **CD63 (MX-49.129.5): sc-5275** or **CD63 (NK1/C3): sc-59286**, our highly recommended monoclonal alternatives to CD63 (H-193). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **CD63 (MX-49.129.5): sc-5275**.