SANTA CRUZ BIOTECHNOLOGY, INC.

CD63 (Y-17): sc-25184



BACKGROUND

The tetraspanins are integral membrane proteins expressed on cell surface and granular membranes of hematopoietic cells and are components of multimolecular 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.

REFERENCES

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- 4. Rous, B.A., et al. 2002. Role of adaptor complex AP-3 in targeting wildtype and mutated CD63 to lysosomes. Mol. Biol. Cell 13: 1071-1082.
- 5. von Lindern, J.J., et al. 2003. Potential role for CD63 in CCR5-mediated human immunodeficiency virus type 1 infection of macrophages. J. Virol. 77: 3624-3633.
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- 7. Pfistershammer, K., et al. 2004. CD63 as an activation-linked T cell costimulatory element. J. Immunol. 173: 6000-6008.
- 8. Lee, M., et al. 2005. Peptide YY and neuropeptide Y induce Villin expression, reduce adhesion, and enhance migration in small intestinal cells through the regulation of CD63, matrix metalloproteinase-3, and Cdc42 activity. J. Biol. Chem. 280: 125-136.

CHROMOSOMAL LOCATION

Genetic locus: Cd63 (mouse) mapping to 10 D3.

SOURCE

CD63 (Y-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CD63 of mouse origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-25184 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD63 (Y-17) is recommended for detection of CD63 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for CD63 siRNA (m): sc-35792, CD63 shRNA Plasmid (m): sc-35792-SH 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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try CD63 (MX-49.129.5): sc-5275, our highly recommended monoclonal aternative to CD63 (Y-17).