CD63 (MX-49.129.5): sc-5275

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 tetraspan 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 superfamilly of leucocyte glycoproteins that includes CD9, CD37 and CD63, 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

2. Horejsi, V., et al. 1991. Novel structurally distinct family of leucocyte surface glycoproteins including CD9, CD37 and CD63, which contain four transmembrane regions. CD63 may play a role in phagocytic and intracellular lysosome-phagosome fusion events.

CHROMOSOMAL LOCATION

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

SOURCE

CD63 (MX-49.129.5) is a mouse monoclonal antibody raised against full length CD63 of human origin.

PRODUCT

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD63 (MX-49.129.5) is available conjugated to agarose (sc-5275), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-5275 HRP), 200 μg/ml, for WB, IHOP and ELISA; to either phycoerythrin (sc-5275 PE), fluorescein (sc-5275 FITC), Alexa Fluor® 488 (sc-5275 AF488), Alexa Fluor® 546 (sc-5275 AF546), Alexa Fluor® 594 (sc-5275 AF594) or Alexa Fluor® 647 (sc-5275 AF647), 200 μg/ml, for WB (RGB), IF, IHOP and FCM; and to either Alexa Fluor® 680 (sc-5275 AF680) or Alexa Fluor® 790 (sc-5275 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, CD63 (MX-49.129.5) is available conjugated to either TRITC (sc-5275 TRITC, 200 μg/ml) or Alexa Fluor® 405 (sc-5275 AF405, 200 μg/ml), for IF, IHOP (IFC) and FCM.

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STORAGE

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

APPLICATIONS

CD63 (MX-49.129.5) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of CD63 core protein: 26 kDa.

Molecular Weight of glycosylated CD63: 30-60 kDa.

SELECT PRODUCT CITATIONS


RESEARCH USE

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