

Integrin α M (2LPM19c): sc-20050

BACKGROUND

Integrin α M, also designated complement component receptor-3 α , CD11b (p170), macrophage antigen α polypeptide, cell surface glycoprotein Mac-1 α subunit, MAC1A, MO1A and ITGAM) is a cell adhesion molecule that acts as a receptor for cell surface ligands such as intracellular adhesion molecules (ICAMs) or soluble ligands. Integrins are heterodimeric proteins that contain an α chain and β chain. Integrin α M combines with the Integrin β 2 to form a leukocyte-specific integrin referred to as macrophage receptor 1 (Mac-1), or inactivated-C3b (iC3b) receptor 3 (CR3). Integrin α M/ β 2 is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles.

CHROMOSOMAL LOCATION

Genetic locus: ITGAM (human) mapping to 16p11.2; Itgam (mouse) mapping to 7 F3.

SOURCE

Integrin α M (2LPM19c) is a mouse monoclonal antibody raised against purified iC3b receptor.

PRODUCT

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

Integrin α M (2LPM19c) is available conjugated to agarose (sc-20050 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-20050 PE), fluorescein (sc-20050 FITC), Alexa Fluor[®] 488 (sc-20050 AF488), Alexa Fluor[®] 546 (sc-20050 AF546), Alexa Fluor[®] 594 (sc-20050 AF594) or Alexa Fluor[®] 647 (sc-20050 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-20050 AF680) or Alexa Fluor[®] 790 (sc-20050 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Integrin α M (2LPM19c) is recommended for detection of Integrin α M of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for Integrin α M siRNA (h): sc-37261, Integrin α M siRNA (m): sc-35693, Integrin α M shRNA Plasmid (h): sc-37261-SH, Integrin α M shRNA Plasmid (m): sc-35693-SH, Integrin α M shRNA (h) Lentiviral Particles: sc-37261-V and Integrin α M shRNA (m) Lentiviral Particles: sc-35693-V.

Molecular Weight of Integrin α M: 170 kDa.

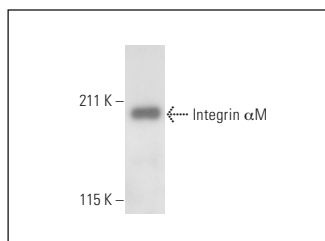
STORAGE

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

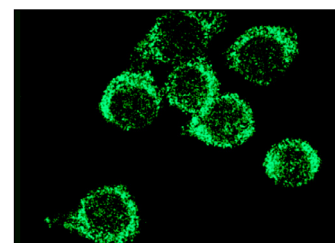
RESEARCH USE

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

DATA



Western blot analysis of Integrin α M expression in human PBL whole cell lysate immunoprecipitated with Integrin α M (2LPM19c): sc-20050 and detected with Integrin α M (H-61): sc-28664.



Integrin α M (2LPM19c): sc-20050. Immunofluorescence staining of methanol-fixed RAW 264.7 cells showing membrane staining.

SELECT PRODUCT CITATIONS

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- Jerke, U., et al. 2013. β 2 integrin-mediated cell-cell contact transfers active myeloperoxidase from neutrophils to endothelial cells. *J. Biol. Chem.* 288: 12910-12919.
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- Chen, X.W., et al. 2017. Recruitment of CD11b⁺Ly6C⁺ monocytes in non-small cell lung cancer xenografts challenged by anti-VEGF antibody. *Oncol. Lett.* 14: 615-622.
- Thinn, A.M.M., et al. 2018. The membrane-distal regions of Integrin α cytoplasmic domains contribute differently to integrin inside-out activation. *Sci. Rep.* 8: 5067.
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- Heinzmann, D., et al. 2020. CD147 is a novel interaction partner of Integrin α M β 2 mediating leukocyte and platelet adhesion. *Biomolecules* 10: E541.

PROTOCOLS

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