

# Integrin $\alpha$ M (M1/70): sc-23937

## BACKGROUND

Integrin  $\alpha$ M (also designated complement component receptor-3  $\alpha$ , CD11b (p170), macrophage antigen  $\alpha$  polypeptide, cell surface glycoprotein Mac-1  $\alpha$  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  $\alpha$  chain and  $\beta$  chain. Integrin  $\alpha$ M combines with the Integrin  $\beta$ 2 to form a leukocyte-specific integrin, referred to as macrophage receptor 1 (Mac-1), or inactivated-C3b (iC3b) receptor 3 (CR3). Integrin  $\alpha$ M/ $\beta$ 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  $\alpha$ M (M1/70) is a rat monoclonal antibody raised against T lymphocyte-enriched C57BL/10 mouse spleen cells.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin  $\alpha$ M (M1/70) is available conjugated to either phycoerythrin (sc-23937 PE) or fluorescein (sc-23937 FITC), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM.

## APPLICATIONS

Integrin  $\alpha$ M (M1/70) is recommended for detection of Integrin  $\alpha$ M of mouse, rat and human origin by immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

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

Molecular Weight of Integrin  $\alpha$ M: 170 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211.

## STORAGE

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

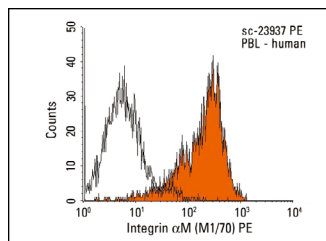
## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## RESEARCH USE

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

## DATA



Integrin  $\alpha$ M (M1/70) PE: sc-23937 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal rat IgG<sub>2b</sub>-PE: sc-2873.

## SELECT PRODUCT CITATIONS

1. Ishihara, K., et al. 2004. The point mutation of tyrosine 759 of the IL-6 family cytokine receptor gp130 synergizes with HTLV-1 pX in promoting rheumatoid arthritis-like arthritis. *Int. Immunol.* 16: 455-465.
2. Zhou, J., et al. 2011. Real time monitoring of biomaterial-mediated inflammatory responses via macrophage-targeting NIR nanoprobes. *Biomaterials* 32: 9383-9390.
3. Xie, Z., et al. 2017. Immune cell-mediated biodegradable theranostic nanoparticles for melanoma targeting and drug delivery. *Small*. E-published.
4. Yu, Y., et al. 2018. Extracellular vesicles from human saliva promote hemostasis by delivering coagulant tissue factor to activated platelets. *J. Thromb. Haemost.* 16: 1153-1163.
5. Demirdjian, S., et al. 2020. Distinct contributions of CD18 integrins for binding and phagocytic internalization of *Pseudomonas aeruginosa*. *Infect. Immun.* 88: e00011-20.
6. Park, H.J., et al. 2021. Butyrate improves skin/lung fibrosis and intestinal dysbiosis in bleomycin-induced mouse models. *Int. J. Mol. Sci.* 22: 2765.
7. El Mahmoudi, N., et al. 2022. Microglial dynamics modulate vestibular compensation in a rodent model of vestibulopathy and condition the expression of plasticity mechanisms in the deafferented vestibular nuclei. *Cells* 11: 2693.
8. Gaige, S., et al. 2022. Constitutively active microglial populations limit anorexia induced by the food contaminant deoxynivalenol. *J. Neuroinflammation* 19: 280.



See **Integrin  $\alpha$ M (2LPM19c): sc-20050** for Integrin  $\alpha$ M antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.