

Integrin α M (C-19): sc-6612

BACKGROUND

Integrin α M, also designated complement component receptor-3 α , CD11b (p170), macrophage antigen a 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.

REFERENCES

- Nathan, C., et al. 1990. Tumor necrosis factor and CD11/CD18 (β 2) integrins act synergistically to lower cAMP in human neutrophils. *J. Cell Biol.* 111: 2171-2181.
- Li, R., et al. 1995. A peptide derived from the intercellular adhesion molecule-2 regulates the avidity of the leukocyte integrins CD11b/CD18 and CD11c/CD18. *J. Cell Biol.* 129: 1143-1153.

CHROMOSOMAL LOCATION

Genetic locus: ITGAM (human) mapping to 16p11.2.

SOURCE

Integrin α M (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Integrin α M of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6612 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Integrin α M (C-19) is recommended for detection of Integrin α M of 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), immunohistochemistry (including paraffin-embedded sections) (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 Integrin α M siRNA (h): sc-37261, Integrin α M shRNA Plasmid (h): sc-37261-SH and Integrin α M shRNA (h) Lentiviral Particles: sc-37261-V.

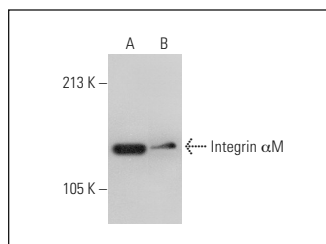
Molecular Weight of Integrin α M: 170 kDa.

Positive Controls: TF-1 cell lysate: sc-2412 or Ramos cell lysate: sc-2216.

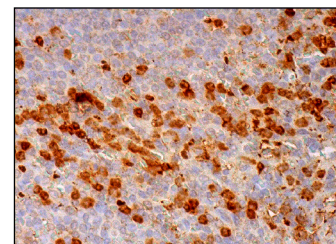
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Integrin α M (C-19): sc-6612. Western blot analysis of Integrin α M expression in TF-1 (A) and Ramos (B) whole cell lysates.



Integrin α M (C-19): sc-6612. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of subset of cells in red pulp.

SELECT PRODUCT CITATIONS

- Pfeiffer, A., et al. 2001. Lipopolysaccharide and ceramide docking to CD14 provokes ligand-specific receptor clustering in rafts. *Eur. J. Immunol.* 31: 3153-3164.
- Piu, F., et al. 2002. Dissection of the cytoplasmic domains of cytokine receptors involved in Stat and Ras dependent proliferation. *Oncogene* 21: 3579-3591.
- Hamzei, M., et al. 2003. Osteoclast stimulating and differentiating factors in human cholesteatoma. *Laryngoscope* 113: 436-442.
- Yang, C.R., et al. 2005. Decoy receptor 3 increases monocyte adhesion to endothelial cells via NF κ B-dependent up-regulation of intercellular adhesion molecule-1, VCAM-1, and IL-8 expression. *J. Immunol.* 174: 1647-1656.
- Capsoni, S., et al. 2012. Intranasal "painless" human nerve growth factors slows amyloid neurodegeneration and prevents memory deficits in App X PS1 mice. *PLoS ONE* 7: e37555.
- Capsoni, S., et al. 2012. Pathogen free conditions slow the onset of neurodegeneration in a mouse model of nerve growth factor deprivation. *J. Alzheimers Dis.* 31: 1-6.

STORAGE

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