

Integrin α M (OX42): sc-53086

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 (mouse) mapping to 7 F3.

SOURCE

Integrin α M (OX42) is a mouse monoclonal antibody raised against peritoneal macrophages of rat origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin α M (OX42) is available conjugated to agarose (sc-53086 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53086 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53086 PE), fluorescein (sc-53086 FITC), Alexa Fluor[®] 488 (sc-53086 AF488), Alexa Fluor[®] 546 (sc-53086 AF546), Alexa Fluor[®] 594 (sc-53086 AF594) or Alexa Fluor[®] 647 (sc-53086 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53086 AF680) or Alexa Fluor[®] 790 (sc-53086 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Integrin α M (OX42) is recommended for detection of Integrin α M of mouse and rat origin by 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 flow cytometry (1 μ g per 1 x 10⁶ cells).

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

Molecular Weight of Integrin α M: 170 kDa.

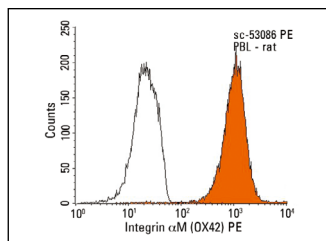
STORAGE

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



Integrin α M (OX42): sc-53086. Indirect FCM analysis of rat peripheral blood leukocytes stained with Integrin α M (OX42), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG_{2a}: sc-3878.

SELECT PRODUCT CITATIONS

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- Zhu, H., et al. 2017. Transient upregulation of Nav1.6 expression in the genu of corpus callosum following middle cerebral artery occlusion in the rats. Brain Res. Bull. 132: 20-27.
- Lai, C.Y., et al. 2018. GluN2B/CaMKII mediates CFA-induced hyperalgesia via HDAC4-modified spinal COX2 transcription. Neuropharmacology 135: 536-546.
- Hanawa-Suetsugu, K., et al. 2019. Phagocytosis is mediated by two-dimensional assemblies of the F-BAR protein GAT7. Nat. Commun. 10: 4763.
- Niu, W., et al. 2020. Surgery-induced cognitive dysfunction is alleviated through triggering receptor expressed on myeloid cells 2. Acta Histochem. 122: 151553.
- Al Sabaani, N. 2021. Inhibition of protein kinase R by C16 protects the retinal ganglion cells from hypoxia-induced oxidative stress, inflammation, and apoptosis. Curr. Eye Res. 46: 719-730.

PROTOCOLS

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