

Integrin α L/M/X/ β 2 (24): sc-53359

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16 α and 8 β subunits heterodimerize to produce more than 20 different receptors. Most integrin receptors bind ligands that are components of the extracellular matrix, including Fibronectin, Collagen and Vitronectin. Certain integrins can also bind to soluble ligands such as Fibrinogen, or to counterreceptors on adjacent cells such as the intracellular adhesion molecules (ICAMs), leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrin-mediated responses. In addition to mediating cell adhesion and cytoskeletal organization, integrins function as signaling receptors. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis.

REFERENCES

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CHROMOSOMAL LOCATION

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

SOURCE

Integrin α L/M/X/ β 2 (24) is a mouse monoclonal antibody raised against Fibronectin-purified monocytes of human origin.

RESEARCH USE

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

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 L/M/X/ β 2 (24) is available conjugated to agarose (sc-53359 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-53359 PE), fluorescein (sc-53359 FITC), Alexa Fluor[®] 488 (sc-53359 AF488), Alexa Fluor[®] 546 (sc-53359 AF546), Alexa Fluor[®] 594 (sc-53359 AF594) or Alexa Fluor[®] 647 (sc-53359 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53359 AF680) or Alexa Fluor[®] 790 (sc-53359 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Integrin α L/M/X/ β 2 (24) is recommended for detection of a Mg²⁺ dependent epitope common to all three Integrin α subunits of human origin by immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

Molecular Weight of Integrin α L/M/X/ β 2: 180 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

SELECT PRODUCT CITATIONS

- Liu, W., Wang, X., Wang, S., Ba, X., Xu, T., Wang, X. and Zeng, X. 2019. RhoGDI2 positively regulates the Rho GTPases activation in response to the β 2 outside-in signaling in T cells adhesion and migration on ICAM-1. *J. Leukoc. Biol.* 106: 431-446.

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 for detailed protocols and support products.