

Integrin α 1 (HM alpha 1): sc-59834

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

1. Hynes, R.O. 1992. Integrins: versatility, modulation, and signaling in cell adhesion. *Cell* 69: 11-25.
2. Miyamoto, S., Akiyama, S.K. and Yamada, K.M. 1995. Synergistic roles for receptor occupancy and aggregation in integrin transmembrane function. *Science* 267: 883-885.
3. Clark, E.A. and Brugge, J.S. 1995. Integrins and signal transduction pathways: the road taken. *Science* 268: 233-239.

CHROMOSOMAL LOCATION

Genetic locus: ITGA1 (human) mapping to 5q11.2; Itga1 (mouse) mapping to 13 D2.2.

SOURCE

Integrin α 1 (HM alpha 1) is an Armenian hamster monoclonal antibody raised against Integrin α 1 of mouse origin.

PRODUCT

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

APPLICATIONS

Integrin α 1 (HM alpha 1) is recommended for detection of Integrin α 1 of mouse, rat and 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 1×10^6 cells).

Suitable for use as control antibody for Integrin α 1 siRNA (h): sc-43125, Integrin α 1 siRNA (m): sc-43126, Integrin α 1 shRNA Plasmid (h): sc-43125-SH, Integrin α 1 shRNA Plasmid (m): sc-43126-SH, Integrin α 1 shRNA (h) Lentiviral Particles: sc-43125-V and Integrin α 1 shRNA (m) Lentiviral Particles: sc-43126-V.

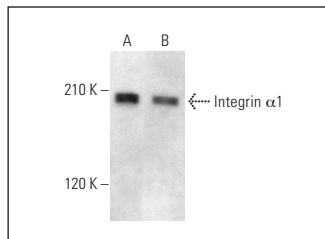
Molecular Weight of Integrin α 1: 180 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or MIA PaCa-2 cell lysate: sc-2285.

STORAGE

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

DATA



Integrin α 1 (HM alpha 1): sc-59834. Western blot analysis of Integrin α 1 expression in HeLa (A) and MIA PaCa-2 (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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