



Integrin $\alpha 5$ (NKI-SAM1): sc-52668

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: ITGA5 (human) mapping to 12q11-q13; Itga5 (mouse) mapping to 15 F3.

SOURCE

Integrin $\alpha 5$ (NKI-SAM1) is a mouse monoclonal antibody raised against U-937 cell line of human origin.

PRODUCT

Each vial contains 200 μg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-52668 PE) or fluorescein (sc-52668 FITC) conjugates for flow cytometry, 100 tests.

APPLICATIONS

Integrin $\alpha 5$ (NKI-SAM1) is recommended for detection of Integrin $\alpha 5$ of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μg per 1×10^6 cells); also recommended for detection of various cells of non-hematopoietic origin.

Suitable for use as control antibody for Integrin $\alpha 5$ siRNA (h): sc-29372.

Molecular Weight of Integrin $\alpha 5$: 150 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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