

Integrin α V (N-19): sc-6616

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.

CHROMOSOMAL LOCATION

Genetic locus: ITGAV (human) mapping to 2q32.1; Itgav (mouse) mapping to 2 D.

SOURCE

Integrin α V (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Integrin α V 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-6616 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Integrin α V (N-19) is recommended for detection of Integrin α V heavy chain of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Integrin α V (N-19) is also recommended for detection of Integrin α V heavy chain in additional species, including bovine and porcine.

Suitable for use as control antibody for Integrin α V siRNA (h): sc-29373, Integrin α V siRNA (m): sc-35694, Integrin α V shRNA Plasmid (h): sc-29373-SH, Integrin α V shRNA Plasmid (m): sc-35694-SH, Integrin α V shRNA (h) Lentiviral Particles: sc-29373-V and Integrin α V shRNA (m) Lentiviral Particles: sc-35694-V.

Molecular Weight of Integrin α V: 125-135 kDa.

Positive Controls: C32 whole cell lysate: sc-2205 or RAW 264.7 whole cell lysate: sc-2211.

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) 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.

SELECT PRODUCT CITATIONS

- Kassis, J., et al. 2002. EBV-expressing AGS gastric carcinoma cell sublines present increased motility and invasiveness. *Int. J. Cancer* 99: 644-651.
- Chellaiah, M.A., et al. 2003. Rho-dependent Rho kinase activation increases CD44 surface expression and bone resorption in osteoclasts. *J. Biol. Chem.* 278: 29086-29097.
- Kojima, T., et al. 2003. Effect of gelatins on human cancer cells *in vitro*. *Cancer Biother. Radiopharm.* 18: 147-155.
- Kaabeche, K., et al. 2005. Cbl-mediated ubiquitination of α 5 Integrin subunit mediates Fibronectin-dependent osteoblast detachment and apoptosis induced by FGFR2 activation. *J. Cell Sci.* 118: 1223-1232.
- Franco, P., et al. 2006. Activation of urokinase receptor by a novel interaction between the connecting peptide region of urokinase and α V/ β 5 Integrin. *J. Cell Sci.* 119: 3424-3434.
- Thews, O., et al. 2009. Impact of reactive oxygen species on the expression of adhesion molecules *in vivo*. *Adv. Exp. Med. Biol.* 645: 95-100.

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.



Try **Integrin α V (P2W7): sc-9969** or **Integrin α V (H-2): sc-376156**, our highly recommended monoclonal alternatives to Integrin α V (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Integrin α V (P2W7): sc-9969**.