

Integrin α V (H-75): sc-10719

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 (H-75) is a rabbit polyclonal antibody raised against amino acids 920-994 mapping near the C-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.

APPLICATIONS

Integrin α V (H-75) is recommended for detection of Integrin α V of mouse, rat, human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Integrin α V (H-75) is also recommended for detection of Integrin α V in additional species, including equine, canine, bovine, porcine and avian.

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, SK-MEL-28 cell lysate: sc-2236 or THP-1 cell lysate: sc-2238.

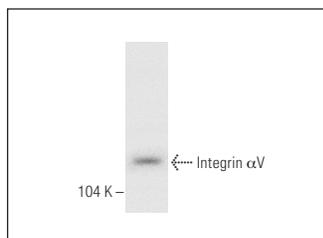
STORAGE

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 V (H-75): sc-10719. Western blot analysis of Integrin α V expression in THP-1 whole cell lysate.

SELECT PRODUCT CITATIONS

- Bohnsack, B.L., et al. 2004. Signaling hierarchy downstream of retinoic acid that independently regulates vascular remodeling and endothelial cell proliferation. *Genes Dev.* 18: 1345-1358.
- Cai, W.J., et al. 2007. The novel proangiogenic effect of hydrogen sulfide is dependent on Akt phosphorylation. *Cardiovasc. Res.* 76: 29-40.
- Chudakova, D.A., et al. 2008. Integrin-associated Lyn kinase promotes cell survival by suppressing acid sphingomyelinase activity. *J. Biol. Chem.* 283: 28806-28816.
- Krishnamurthy, M., et al. 2008. Expression and function of $\alpha\beta$ integrins in pancreatic β (INS-1) cells. *J. Cell Commun. Signal.* 2: 67-79.
- Blair, H.C., et al. 2009. Osteopetrosis with micro-lacunar resorption because of defective integrin organization. *Lab. Invest.* 89: 1007-1017.
- Zhang, C.Y., et al. 2010. 3'-Sulfo-Le^x is important for regulation of integrin subunit α_v . *Biochemistry* 49: 7811-7820.
- Tsai, F.C., et al. 2011. Downregulation of the integrin α_v signaling pathway in uterine leiomyomas. *Gynecol. Obstet. Invest.* 71: 129-135.
- Mouguelar, V.S., et al. 2011. The integrin-binding motif RGDS induces protein tyrosine phosphorylation without activation in *Bufo arenarum* (*Amphibia*) oocytes. *Reproduction* 141: 581-593.
- Wu, W., et al. 2013. Regulation of integrin α_v subunit expression by sulfatide in hepatocellular carcinoma cells. *J. Lipid Res.* 54: 936-952.
- Liu, X. and Giguère, V. 2014. Inactivation of RAR β inhibits Wnt1-induced mammary tumorigenesis by suppressing epithelial-mesenchymal transitions. *Nucl. Recept. Signal.* 12: e004.


 MONOS
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Try **Integrin α V (P2W7): sc-9969** or **Integrin α V (H-2): sc-376156**, our highly recommended monoclonal alternatives to Integrin α V (H-75). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Integrin α V (P2W7): sc-9969**.