**BACKGROUND**

Integrins are heterodimers composed of noncovalently associated transmembrane $\alpha$ and $\beta$ subunits. The 16 $\alpha$ and 8 $\beta$ 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 fibronogen, 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**


**CHROMOSOMAL LOCATION**

Genetic locus: ITGAV (human) mapping to 2q32.1, ITGB5 (human) mapping to 3q21.2; Itgav (mouse) mapping to 2 D, Itgb3 (mouse) mapping to 11 E1.

**SOURCE**

Integrin $\alphaV/\beta5$ (P1F76) is a mouse monoclonal antibody raised against UCLA P3 cells of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for inhibition, sc-13588 L, 200 µg/0.1 ml.

**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.

**APPLICATIONS**

Integrin $\alphaV/\beta5$ (P1F76) is recommended for detection of Integrin $\alphaV$ and Integrin $\beta5$ of mouse, rat and human origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Integrin $\alphaV$: 170 kDa.
Molecular Weight of Integrin $\beta5$: 100 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).
2) Immunofluorescence: use m-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Integrin $\alphaV/\beta5$ (P1F76) sc-13588. Immunofluorescence staining of methanol-fixed THP-1 cells showing membrane and cell junction localization.

**SELECT PRODUCT CITATIONS**


**CONJUGATES**

See Integrin $\alphaV$ (P2W7): sc-9969 for Integrin $\alphaV$ antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.