

Monoclonal Antibody to Integrin alpha V / beta 5 - Purified

Alternate names:	Integrin beta 5, Vitronectin receptor
Catalog No.:	BM519
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	<p>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.</p>
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	P1F6
Immunogen:	Human UCLA P3 cells (lung carcinoma).
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein A Buffer System: PBS containing 0.09% Sodium Azide as preservative
Applications:	ELISA. Flow Cytometry. Immunofluorescence. Immunoprecipitation. Immunohistochemistry on Frozen sections: For use on Human carcinomas, normal epithelium and keratinocytes using Acetone or Paraformaldehyde fixed tissue sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** This antibody reacts to Integrin alpha V beta 5. When used at $> 1/1000$, this antibody inhibits the attachment of HT29 cells to vitronectin. It also inhibits the attachment of carcinoma and melanoma cells to vitronectin.
Species: Human, Chicken.
Other species not tested.
- Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.
- General Readings:**
1. Aplin JD, Spanswick C, Behzad F, Kimber SJ, Vićovac L. Integrins beta 5, beta 3 and alpha v are apically distributed in endometrial epithelium. *Mol Hum Reprod.* 1996 Jul;2(7):527-34. PubMed PMID: 9239663.
 2. Wayner EA, Orlando RA, Cheresch DA. Integrins alpha v beta 3 and alpha v beta 5 contribute to cell attachment to vitronectin but differentially distribute on the cell surface. *J Cell Biol.* 1991 May;113(4):919-29. PubMed PMID: 1709170.
 3. Weinacker A, Chen A, Agrez M, Cone RI, Nishimura S, Wayner E, et al. Role of the integrin alpha v beta 6 in cell attachment to fibronectin. Heterologous expression of intact and secreted forms of the receptor. *J Biol Chem.* 1994 Mar 4;269(9):6940-8. PubMed PMID: 8120056.