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Rabbit Anti-Integrin Alpha V + Beta 3 (CD51+CD61) antibody

SL1310R

Product Name:	Integrin Alpha V + Beta 3 (CD51+CD61)
Chinese Name:	整合素αVβ3抗体
Alias:	CD51 + CD61; CD51; CD61; GP3A; GPIIIa; integrin alpha v; integrin beta 3; intregrin alpha v beta 3; ITGAV; ITGB3; Platelet membrane glycoprotein IIIa; Vitronectin receptor alpha subunit; VNRA; Antigen identified by monoclonal antibody L230; CD51 antigen; CD61 antigen; DKFZp686A08142; Integrin alpha V (vitronectin receptor, alpha polypeptide, antigen CD51); integrin alpha v; Integrin beta 3 (platelet glycoprotein IIIa, antigen CD61); Integrin beta chain beta 3; intregrin alpha v beta 3; ITGAV; MSK8; Platelet glycoprotein IIIa; Platelet membrane glycoprotein IIIa; Vitronectin receptor alpha subunit; Vitronectin receptor subunit alpha.
文献引用 PubMed :	**Specific References(6)**|SL1310R has been referenced in 6 publications. **[IF=7.60]**Mondal, Goutam, Sugata Barui, and Arabinda Chaudhuri. "The relationship between the cyclic-RGDfK ligand and αvβ3 integrin receptor." Biomaterials (2013).**Human**. PubMed:23702147 **[IF=5.56]**Jiang, Lei, et al. "64Cu-Labeled Divalent Cystine Knot Peptide for Imaging Carotid Atherosclerotic Plaques." Journal of Nuclear Medicine (2015): jnumed-115.**IHC-F;Mouse**. PubMed:25908832 **[IF=2.47]**Chen, Ming, et al. "Periostin activates pathways involved in epithelial-mesenchymal transition in adamantinomatous craniopharyngioma." Journal of the Neurological Sciences (2015).**WB;Human**. PubMed:26723972

	[IF=3.52]Chen, Li, and David R. Brigstock. "Integrins and heparan sulfate proteoglycans on hepatic stellate cells (HSC) are novel receptors for HSC-derived exosomes." FEBS letters (2016).**other;Mouse**. PubMed:27714787 [IF=3.55]Bian, Qin, et al. "Mechanosignaling activation of TGFβ maintains intervertebral disc homeostasis." Bone Research 5 (2017): 17008**IHC-P;Mouse**. PubMed:28392965 [IF=2.83]Li, Yin, Lin Xiong, and Jianping Gong. "Lyn kinase enhanced hepatic fibrosis by modulating the activation of hepatic stellate cells." Am J Transl Res 9.6 (2017): 2865-2877.**IHC-F;Mouse**. PubMed:28670375
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestIF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Integrin Alpha V + Beta 3:
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. They are known to participate in cell adhesion as well as cell-surface mediated signalling. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. CD51 encodes integrin alpha chain V. The I-domain containing integrin alpha V undergoes post-translational cleavage to yield disulfide-linked heavy and light chains, that combine with multiple integrin beta chains to form different integrins. The CD61 protein product is the integrin beta chain beta 3. Integrin beta 3 is found along with the alpha IIb chain in platelets. Integrin alpha V/beta 3 is a receptor for cytotactin, fibronectin, laminin, matrix metalloproteinase 2, osteopontin, osteomodulin, prothrombin, thrombospondin,

vitronectin and von Willebrand factor. Integrin alpha V/beta 3 recognizes the sequence R-G-D in a wide array of ligands. The alpha V integrins are receptors for vitronectin, cytotactin, fibronectin, fibrinogen, laminin, matrix metalloproteinase 2, osteopontin, osteomodulin, prothrombin, thrombospondin and von Willebrand factor. They recognize the sequence R-G-D in a wide array of ligands.

Subcellular Location:
Cell Membrane; single-pass type I membrane protein.

SWISS:
P05106, P06756

Gene ID:
3685

Database links:

Entrez Gene: 3685Human

Entrez Gene: 3690Human

Omim: 173470Human

Omim: 193210Human

SwissProt: P05106Human

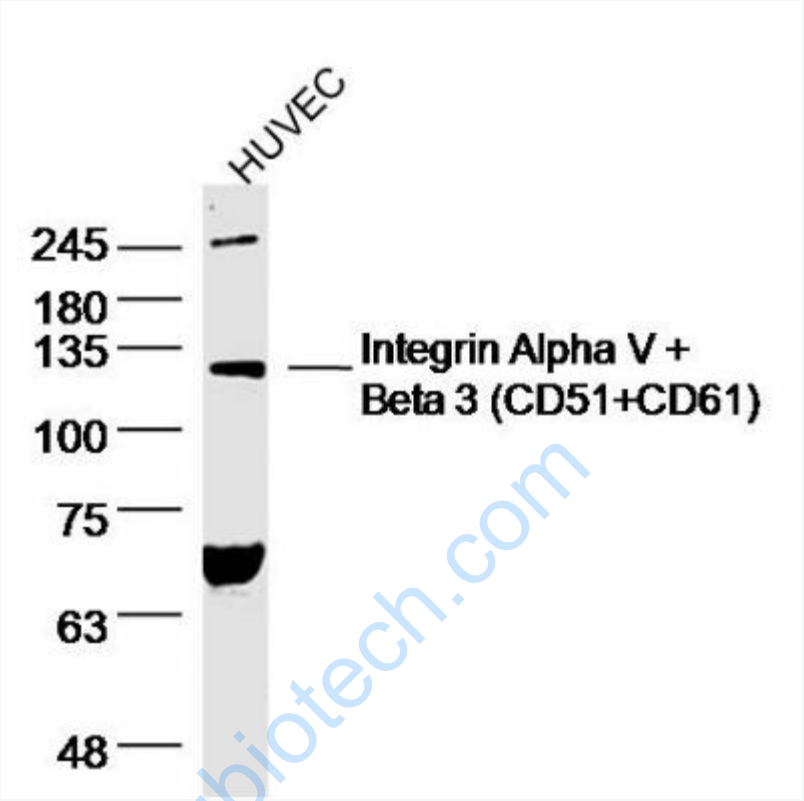
SwissProt: P06756Human

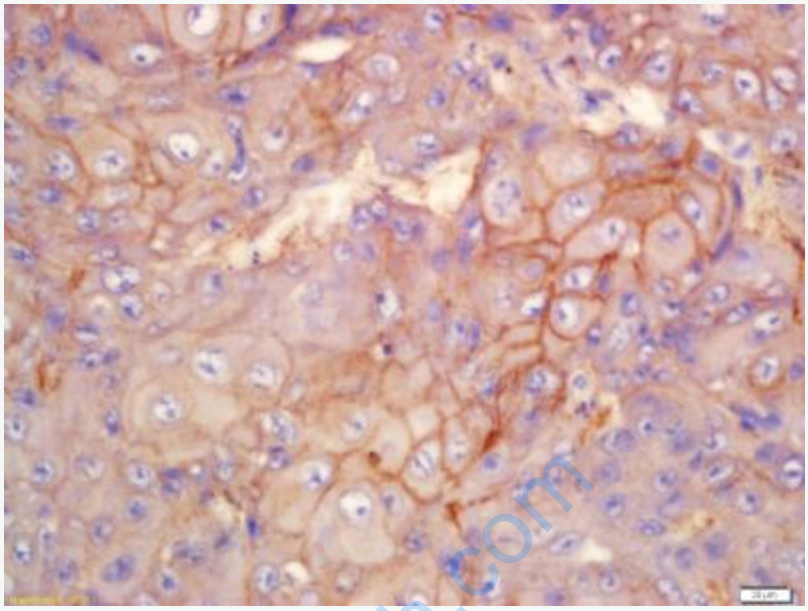
Unigene: 218040Human

Unigene: 436873Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

整合素αVβ3为二聚体的跨膜glycoprotein质，可以调节Tumour细胞在多种Extracellular matrix蛋白中的粘附和迁移，在被激活的endothelial cells中有较高的表达，并在新生血管生成过程中发挥优势。
整合素αVβ3在细胞外的信号传入细胞内调节细胞生长、改变细胞形态、影响细胞运动，
并在Tumour侵袭和转移的过程中起重要作用.整合素αVβ3是特异性表达在vascular endothelial cell表面的粘附因子。

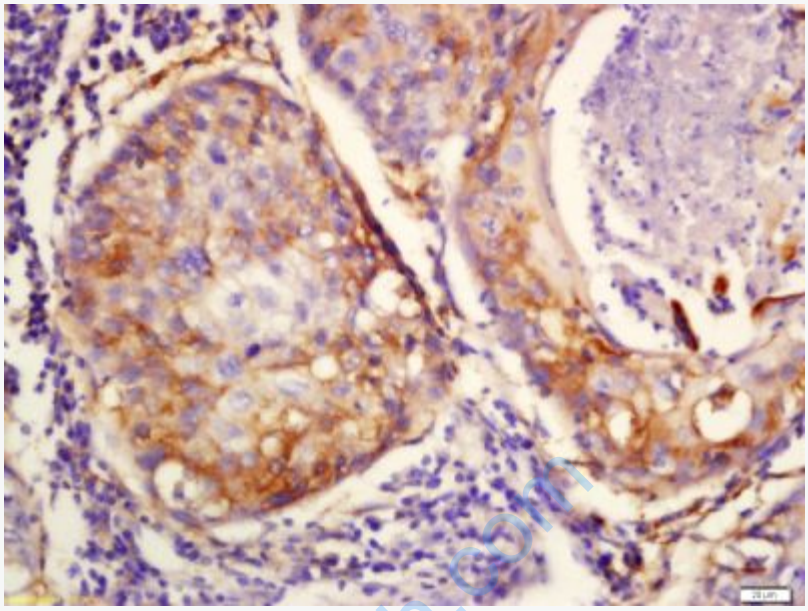
Picture:	 Sample: HUVEC (human)Cell Lysate at 40 ug Primary: Anti- Integrin Alpha V + Beta 3 (CD51+CD61) (SL1310R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 116 kD Observed band size: 120 kD



Tissue/cell: Human laryngeal tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

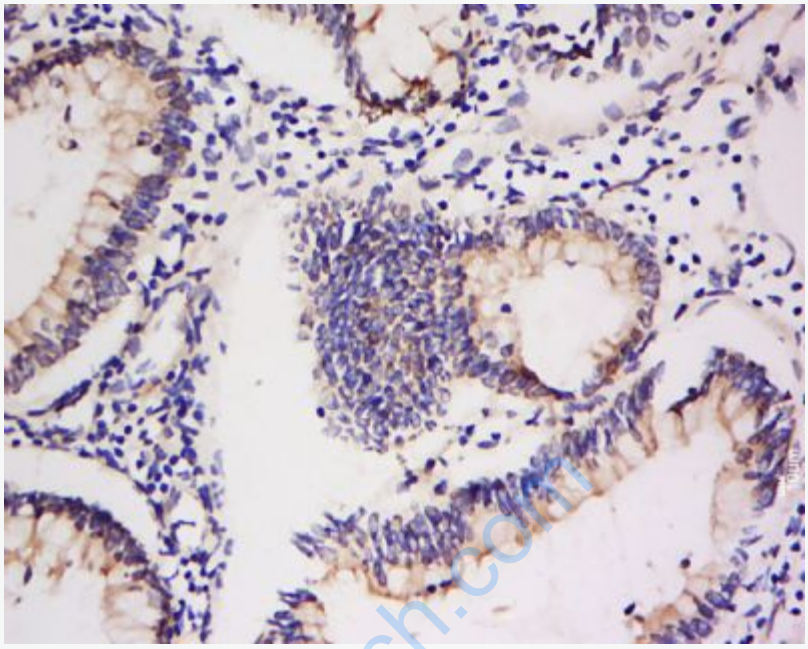
Incubation: Anti-Integrin Alpha V + Beta 3 (CD51 + CD61) Polyclonal Antibody, Unconjugated(SL1310R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: Human lung cancer tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

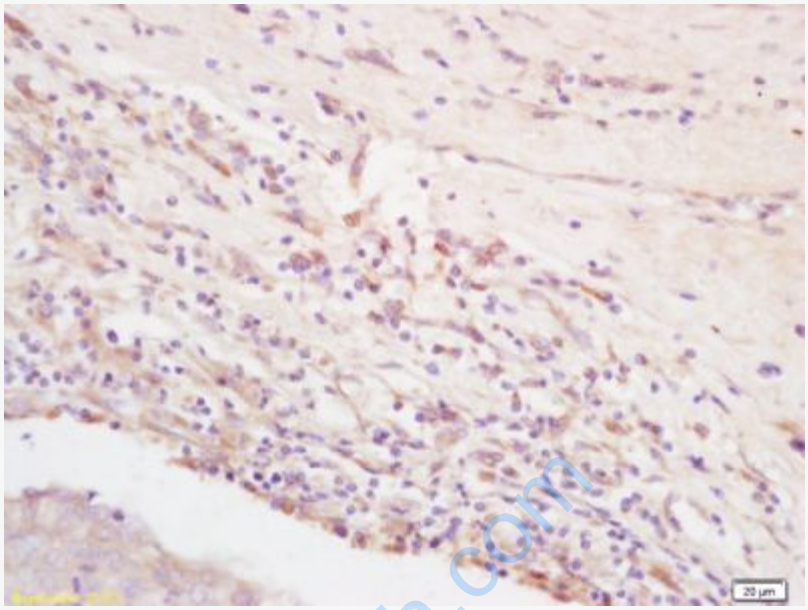
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-Integrin Alpha V + Beta 3 (CD51 + CD61) Polyclonal Antibody, Unconjugated(SL1310R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



cell: mouse lung.

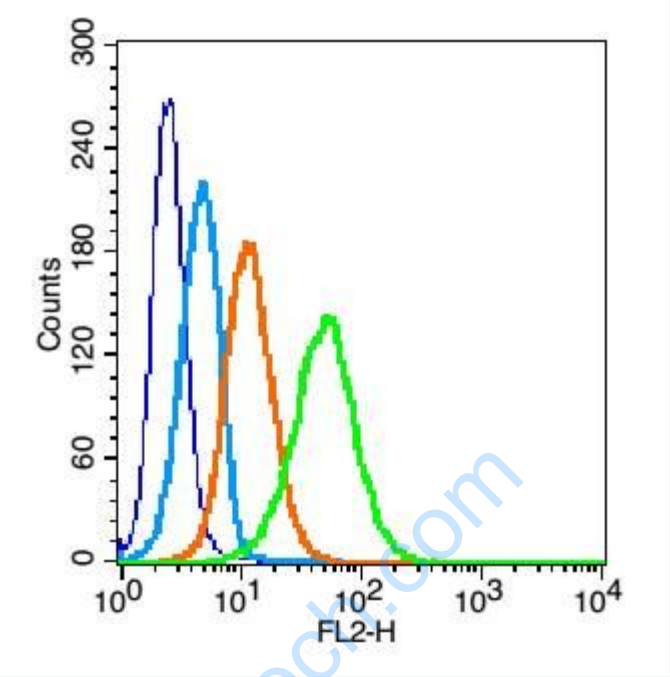
Incubation: Avoid light, at 4°C for 40 minutes. Red line: Blank control (mouse lung cells),2X10^6/ml, at 4°C for 40 minutes. Green line: (primary antibody) Integrin Alpha V + Beta 3 (CD51+CD61) (SL1310R), (secondary antibody)Goat Anti-rabbit IgG/FITC (SL1310R), 1:00, at 4°C for 40 minutes.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-Integrin Alpha V + Beta 3(CD51+CD61) Polyclonal Antibody, Unconjugated(SL1310R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: U937(blue).

Primary Antibody: Rabbit Anti-Integrin Alpha V + Beta 3 (CD51+CD61) antibody(SL1310R), Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA;

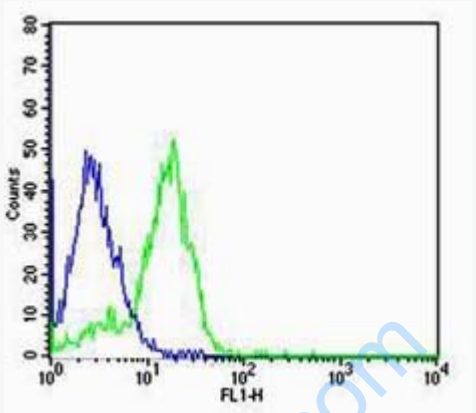
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min). Primary antibody (SL1310R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30

min on ice. Acquisition of 20,000 events was performed.



Cell: MCF-7

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of Rabbit IgG isotype control (Cat#: bs-1310R) on MCF-7(green) compared with control in the absence of primary antibody (blue) followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG(H+L) secondary antibody .