

Rabbit Anti-Integrin alpha 4 antibody

SL0641R

Product Name:	Integrin alpha 4
Chinese Name:	整合素α4抗体
Alias:	Alpha 4 subunit of VLA 4 receptor;ITG-α4: Antigen CD49D; CD 49d; CD49d; CD49d antigen; CDw49d; IA4; Integrin alpha IV; ITGA 4; ITGA4; LPAM23; MGC90518; Very Late Activation Antigen 4; Very Late Activation Protein 4 Receptor Alpha 4 Subunit; VLA 4; VLA4; integrin alpha-4; ITA4_HUMAN;
文献引用	Specific References(1) SL0641R has been referenced in 1 publications.
_	[IF=3.53]Lee, Tao-Chen, et al. "Comparison of Surface Markers between Human and
Pub Med	Rabbit Mesenchymal Stem Cells." PLOS ONE 9.11 (2014): e111390.Rabbit.
·	PubMed:25380245
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1µg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	111kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Integrin alpha 4:551-650/1032 <extracellular></extracellular>
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

Integrin alpha 4 (also called CD49d) is a 150 kDa protein that possesses a large extracellular domain involved in ligand binding, a single transmembrane domain, and an intracellular regulatory domain possessing multiple sites for phosphorylation. Integrin alpha 4 forms heterodimers with integrins beta 1 and beta 7. Integrin alpha 4 is expressed on leukocytes and leukocyte precursors, neural crest cells, and developing skeletal muscles and is essential for embryogenesis, hematopoiesis, and immune responses. The presence of integrin alpha 4 promotes cell migration and inhibits cell spreading and contractility. Integrin alpha 4 function has been implicated in the pathogenesis of multiple diseases including asthma, rheumatoid arthritis, Crohn's disease, ulcerative colitis, hepatitis C, and multiple sclerosis, and therefore, modulation of integrin alpha 4 function has become an important target for drug discovery.

Function:

Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells.

Product Detail:

Subunit:

Heterodimer of an alpha and a beta subunit.

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Post-translational modifications:

Phosphorylation on Ser-1027 inhibits PXN binding.

Similarity:

Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

SWISS:

P13612

Gene ID:

3676

Database links:

Entrez Gene: 3676Human

Entrez Gene: 16401Mouse

Omim: 192975Human

SwissProt: P13612Human

SwissProt: Q00651Mouse

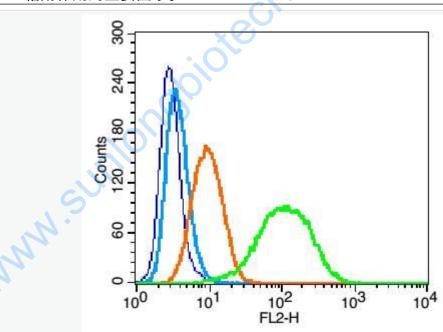
<u>Unigene: 440955</u>Human

Unigene: 31903Mouse

Important Note:

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

整合素-α-4型 Integrin α4 (CD49d)整合素-α是介导细胞与Extracellular matrix粘附作用的主要因子。



Picture:

Blank control: U937(blue).

Primary Antibody: Rabbit Anti-Integrin alpha 4 antibody(SL0641R), Dilution: $1\mu g$

in 100 µL 1X PBS containing 0.5% BSA;

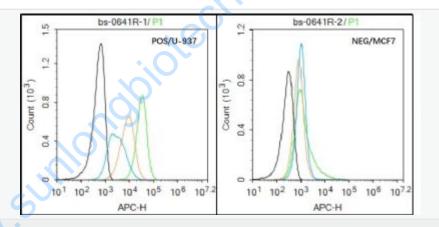
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

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 (SL0641R) 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.



Black line: Positive blank control (U937); Negative blank control (MCF7)

Green line: Primary Antibody (Rabbit Anti-Integrin alpha 4 antibody (SL0641R))

Orange line: Isotype Control Antibody (Rabbit IgG).

Blue line: Secondary Antibody (Goat anti-rabbit IgG-AF647)

U937 (Positive) and MCF7 (Negative control) cells (black) were incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with Integrin alpha 4 Antibody(SL0641R) at 1:50 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS,

followed by secondary antibody(blue) incubation for 40 min at room temperature.
Acquisitions of 20,000 events were performed. Cells stained with primary antibody
(green), and isotype control (orange).

