

Rabbit Anti-Integrin alpha 1 antibody

SL2095R

Product Name:	Integrin alpha 1
Chinese Name:	整合素α1抗体
Alias:	CD 49a; CD49a; CD49 antigen-like family member A; CD49a; CD49a antigen; Integrin alpha-1; ITA1_HUMAN; Itga 1; ITGA1; Laminin and collagen receptor; Very late activation protein 1; VLA 1; VLA-1; VLA1.
	Specific References(1) SL2095R has been referenced in 1 publications.
文献引用	[IF=2.81]Zhang, Rui, et al. "Rho/MRTF-A-Induced Integrin Expression Regulates
Pub Med	Angiogenesis in Differentiated Multipotent Mesenchymal Stem Cells." Stem Cells
:	International 2015 (2015).WB;Rat.
	PubMed:25949242
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse,
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.
Molecular weight:	128kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Integrin alpha 1:1001-1179/1179
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

Integrins are important extracellular matrix (ECM) receptor proteins located on cell surfaces. They are hetrodimers composed of an alpha and a beta transmembrane glycoprotein subunit. Around twenty two different integrins (different alpha/ beta subunit combinations) are found in nature. Integrins are generally present in high concentrations at the cell surface, but, unlike most other cell surface receptors, they bind ligands with very low affinity. Due to their weak individual binding, integrins need to cluster and bind in groups in order to effectively bind the ECM. Integrins bind many different ligands including laminin. Each integrin is made up of a large N terminal extracellular domain that binds the ECM ligand and a small C terminal cytoplasmic domain that mediates interaction with the actin cytoskeleton and signaling function. Alpha 1 integrin along with alpha 2, alpha L and alpha M has a unique inserted domain. Integrin alpha 1 is a receptor for laminin and collagen. The alpha1 subunit is also known as CD49a. CD49a associates with CD29 (beta 1 integrin), to form an alpha1 beta1 heterodimer, identified as the rat homologue to VLA1, which is involved in cellular adhesion to laminin and collagen.

Function:

Integrin alpha-1/beta-1 is a receptor for laminin and collagen. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen.

Product Detail:

Subunit:

Heterodimer of an alpha and a beta subunit. Alpha-1 associates with beta-1. Interacts with RAB21.

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Similarity:

Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

Contains 1 VWFA domain.

SWISS:

P56199

Gene ID:

3672

Database links:

Entrez Gene: 3672 Human

Entrez Gene: 109700 Mouse

Entrez Gene: 25118 Rat

Omim: 192968 Human

SwissProt: P56199 Human

SwissProt: Q3V3R4 Mouse

SwissProt: P18614 Rat

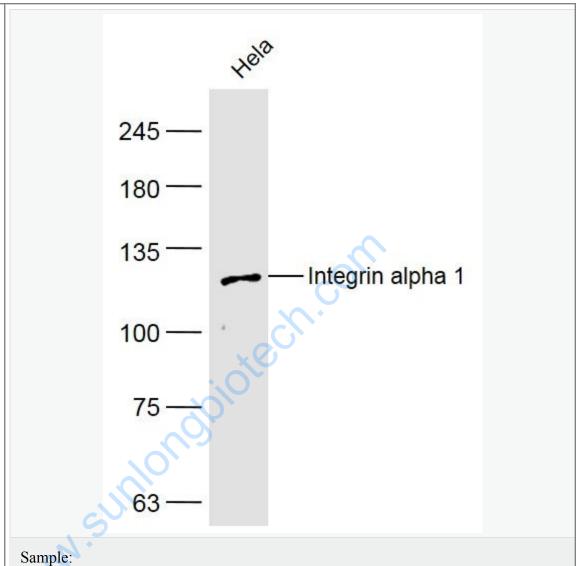
Unigene: 644352 Human

Unigene: 482186 Mouse

Unigene: 91044 Rat

Important Note:

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



Picture:

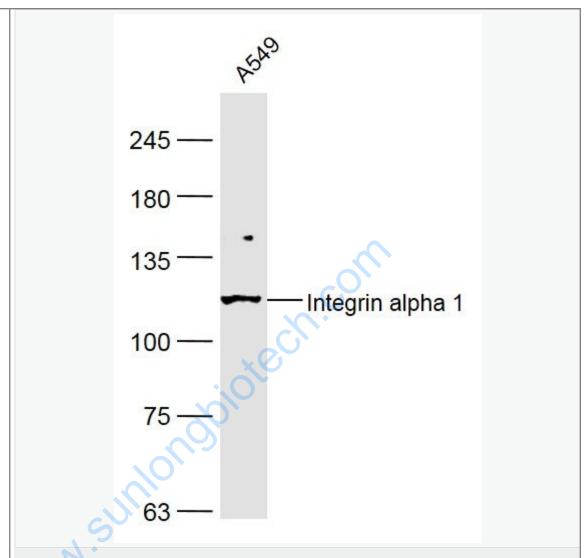
Hela (Human) Cell Lysate at 40 ug

Primary: Anti-Integrin alpha 1 (SL2095R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 128 kD

Observed band size: 128 kD



Sample:

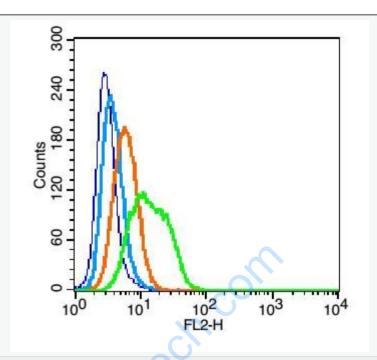
A549 (Human) Cell Lysate at 40 ug

Primary: Anti-Integrin alpha 1 (SL2095R) at 1/300 dilution

 $Secondary: IRDye800CW\ Goat\ Anti-Rabbit\ IgG\ at\ 1/20000\ dilution$

Predicted band size: 128 kD

Observed band size: 128 kD



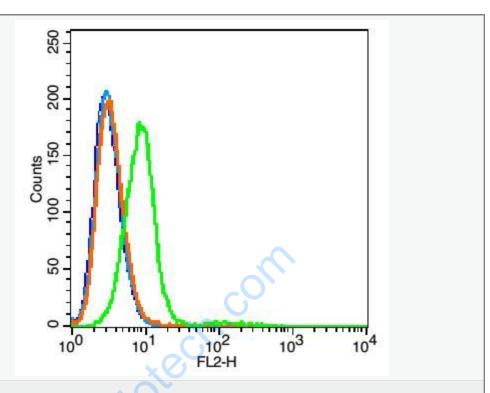
Blank control: U937(blue).

Primary Antibody: Rabbit Anti- Integrin alpha 1 antibody(SL2095R), Dilution: $1\mu g$ in $100~\mu L$ 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 (SL2095R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% 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.



Blank control: RSC96 cells(blue).

Primary Antibody: Rabbit Anti-Integrin alpha 1 antibody(SL2095R), Dilution: $5\mu g$ in $100~\mu L$ 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.