

For Research Use Only

# Integrin Alpha 1 Polyclonal antibody



Catalog Number: 22146-1-AP

Featured Product

4 Publications

## Basic Information

**Catalog Number:**

22146-1-AP

**Size:**

150UL, Concentration: 207 µg/ml by Bradford method using BSA as the standard;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG17584

**GenBank Accession Number:**

BC137121

**GeneID (NCBI):**

3672

**Full Name:**

integrin, alpha 1

**Calculated MW:**

1179 aa, 131 kDa

**Observed MW:**

180 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:2000

IHC 1:20-1:200

## Applications

**Tested Applications:**

FC, IHC, WB, ELISA

**Cited Applications:**

IF, IHC, WB

**Species Specificity:**

human

**Cited Species:**

human, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB : HepG2 cells, SMMC-7721 cells, HeLa cells

IHC : human tonsillitis tissue,

## Background Information

The integrins are a superfamily of cell adhesion receptors that bind to extracellular matrix ligands, cell-surface ligands, and soluble ligands (PMID: 17543136). They are transmembrane  $\alpha\beta$  heterodimers and at least 24 distinct integrin heterodimers are formed by the combination of 18  $\alpha$  and eight  $\beta$  known subunits (PMID: 17543136; 20029421). In addition to mediating cell adhesion, integrins also play important roles in modulating signal transduction pathways that control cellular responses including migration, proliferation, differentiation, and apoptosis (PMID:19118207). Integrin alpha-1 (ITGA1, CD49a) combines with the beta 1 subunit (ITGB1, CD29) to form a cell-surface receptor for collagen and laminin. This receptor is involved in cell-cell adhesion and may play a role in inflammation and fibrosis. Integrin alpha-1 is a transmembrane glycoprotein with an apparent molecular weight of 180-250 kDa, larger than the calculated molecular weight of 131 kDa (PMID: 2475259; 3257425; 11557277; 18840653).

## Notable Publications

Author	Pubmed ID	Journal	Application
Junfen Xu	32626940	Int J Oncol	WB,IHC,IF
Jing Li	27344201	J Biomech	WB,IF
Hai Li	32071551	Int J Biol Sci	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

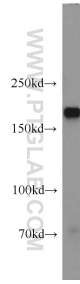
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

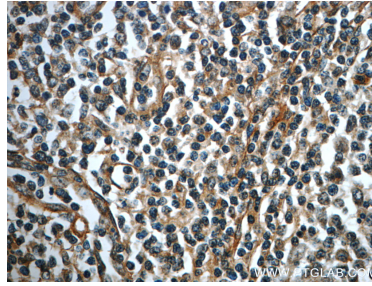
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

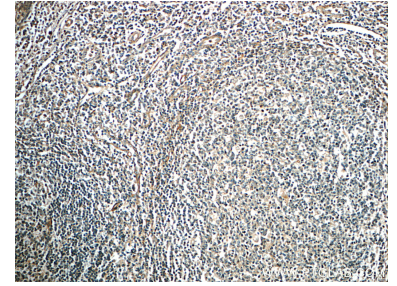
## Selected Validation Data



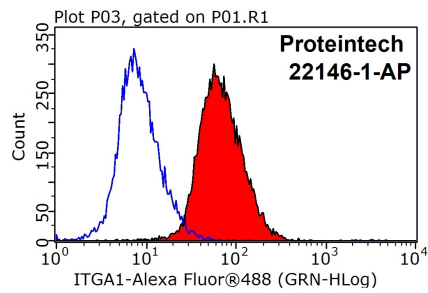
HepG2 cells were subjected to SDS PAGE followed by western blot with 22146-1-AP (ITGA1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis slide using 22146-1-AP (ITGA1 Antibody) at dilution of 1:50 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human tonsillitis slide using 22146-1-AP (ITGA1 Antibody) at dilution of 1:50 (under 10x lens).



1X10<sup>6</sup> HeLa cells were stained with 0.2ug Integrin alpha-1 antibody (22146-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.