

For Research Use Only

Integrin alpha-1 Polyclonal antibody



Catalog Number: 22146-1-AP

Featured Product

7 Publications

Basic Information

Catalog Number: 22146-1-AP	GenBank Accession Number: BC137121	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 240 µg/ml by Nanodrop and 207 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 3672	Recommended Dilutions: WB 1:500-1:2000 IHC 1:50-1:500
Source: Rabbit	Full Name: integrin, alpha 1	
Isotype: IgG	Calculated MW: 1179 aa, 131 kDa	
Immunogen Catalog Number: AG17584	Observed MW: 180 kDa	

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 liver tissue, 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 α and eight β 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
Meng-Meng Wei	33058923	J Ethnopharmacol	WB
Keqiu Jiang	33184263	Cell Death Dis	WB
Junfen Xu	32626940	Int J Oncol	WB,IHC,IF

Storage

Storage:

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

Storage Buffer:

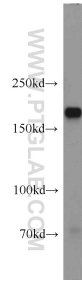
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

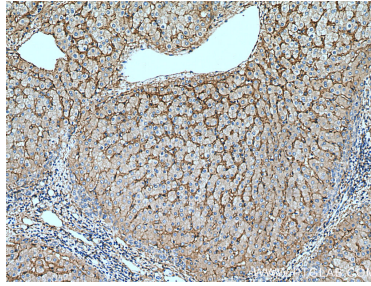
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

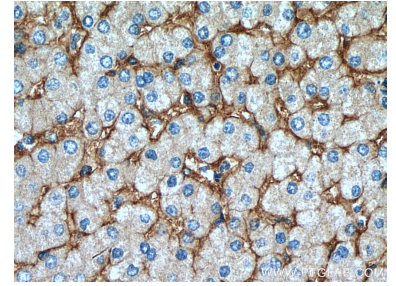
Selected Validation Data



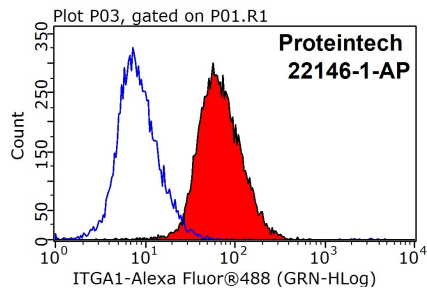
HepG2 cells were subjected to SDS PAGE followed by western blot with 22146-1-AP (ITGA1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 22146-1-AP (Integrin Alpha 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 22146-1-AP (Integrin Alpha 1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ 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.