

Integrin alpha 1 Monoclonal antibody

Catalog Number: 68211-1-Ig

Basic Information

Catalog Number:

68211-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG30631

GenBank Accession Number:

BC137121

GeneID (NCBI):

3672

UNIPROT ID:

P56199

Full Name:

integrin, alpha 1

Calculated MW:

1179 aa, 131 kDa

Observed MW:

180 kDa

Purification Method:

Protein A purification

CloneNo.:

1C4F2

Recommended Dilutions:

WB 1:5000-1:50000

IF-P 1:200-1:800

Applications

Tested Applications:

WB, IF-P, ELISA

Species Specificity:

human

Positive Controls:

WB : HepG2 cells, human placenta tissue

IF-P : human placenta 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).

Storage

Storage:

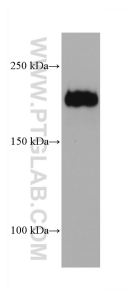
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

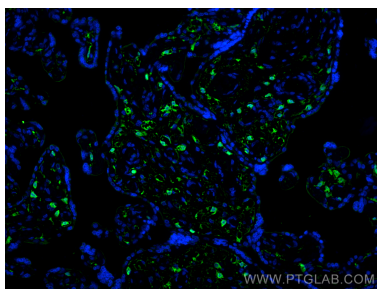
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

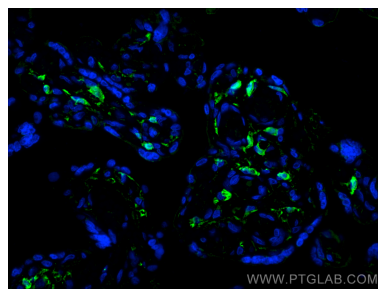
Selected Validation Data



HepG2 cells were subjected to SDS PAGE followed by western blot with 68211-1-Ig (Integrin alpha-1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using Integrin alpha 1 antibody (68211-1-Ig, Clone: 1C4F2) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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