## For Research Use Only

## Integrin alpha 1 Monoclonal antibody, PBS Only (Detector)

Proteintech®
Antibodies | ELISA kits | Proteins
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**Purification Method:** 

Protein A purification

CloneNo.:

1C4F2

Catalog Number: 68211-1-PBS

**Basic Information** 

Catalog Number: GenBank Accession Number:

68211-1-PBS BC137121
Size: GeneID (NCBI):

1 mg/ml 3672

Source: UNIPROT ID: Mouse P56199

Isotype: Full Name:

IgG2a integrin, alpha 1
Immunogen Catalog Number: Calculated MW:

AG30631 1179 aa, 131 kDa

Observed MW: 180 kDa

**Applications** 

**Tested Applications:** 

WB, IF-P, Cytometric bead array, Indirect ELISA

Species Specificity:

human

## **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).

Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

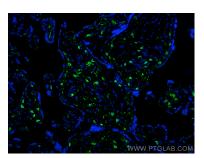
Storage Buffer:

PBS Only

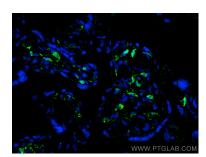
## Selected Validation Data



HepG2 cells were subjected to SDS PAGE followed by western blot with 68211-1-1g (Integrin alpha-1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68211-1-PBS in a different storage buffer formulation.

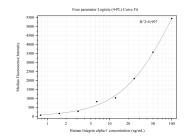


Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using Integrin alpha 1 antibody (68211-1-Ig, Clone: 1C4F2) at dilution of 1:400 and Multi-rAb Coralite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68211-1-PBS in a different storage buffer formulation. buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using Integrin alpha 1 antibody (68211-1-lg, 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). This data was developed using the same antibody clone with 68211-1-PBS in a different storage buffer formulation.





Cytometric bead array standard curve of MP50423-3, Integrin alpha-1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68211-4-PBS. Detection antibody: 68211-1-PBS. Standard:Ag30631. Range: 0.781-100 ng/mL