

Integrin alpha 1 Recombinant monoclonal antibody

Catalog Number: 87056-2-RR

Basic Information

Catalog Number:

87056-2-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

EG2089

GenBank Accession Number:

BC137121

GeneID (NCBI):

3672

UNIPROT ID:

P56199

Full Name:

integrin, alpha 1

Calculated MW:

1179 aa, 131 kDa

Observed MW:

200 kDa

Purification Method:

Protein A purification

CloneNo.:

25198487

Recommended Dilutions:

WB: 1:2000-1:10000

IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IF/ICC, ELISA

Species Specificity:

human

Positive Controls:

WB : HeLa cells, human placenta tissue, HepG2 cells, HT-29 cells

IF/ICC : HeLa cells,

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:

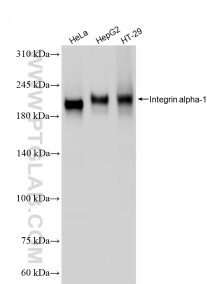
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

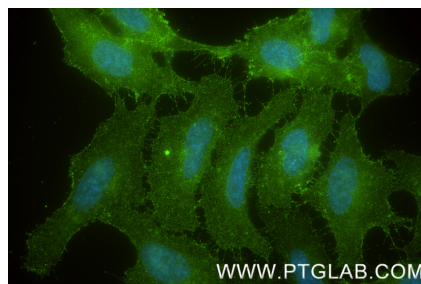
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

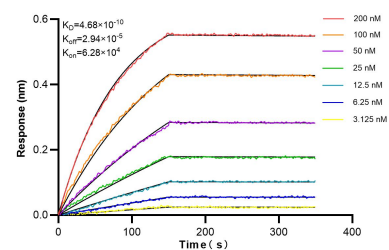
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87056-2-RR (Integrin alpha-1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Integrin alpha 1 antibody (87056-2-RR, Clone: 251984B7) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 87056-2-RR against Human Integrin alpha 1 were performed. The affinity constant is 0.468 nM.