

For Research Use Only

# Integrin alpha 1 Recombinant monoclonal antibody

Catalog Number: 87056-2-RR



## Basic Information

Catalog Number:	87056-2-RR	GenBank Accession Number:	BC137121	Purification Method:	Protein A purification
Size:	100ul, Concentration: 1000 µg/ml by Nanodrop;	GenID (NCBI):	3672	CloneNo.:	251984B7
Source:	Rabbit	UNIPROT ID:	P56199	Recommended Dilutions:	WB: 1:2000-1:10000 IF/ICC: 1:50-1:500
Isotype:	IgG	Full Name:	integrin, alpha 1		
Immunogen Catalog Number:	EG2089	Calculated MW:	1179 aa, 131 kDa		
		Observed MW:	200 kDa		

## Applications

Tested Applications:	WB, IF/ICC, ELISA	Positive Controls:	WB: HeLa cells, human placenta tissue, HepG2 cells, HT-29 cells
Species Specificity:	human	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  $\alpha$  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

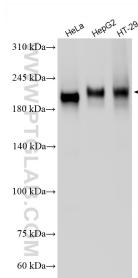
Storage:  
Store at -20°C. Stable for one year after shipment.  
Storage Buffer:  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

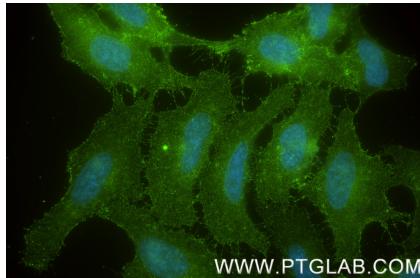
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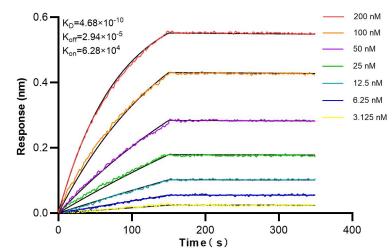
## Selected Validation Data



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.



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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.