

## [KD Validated] Anti-ITGB1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

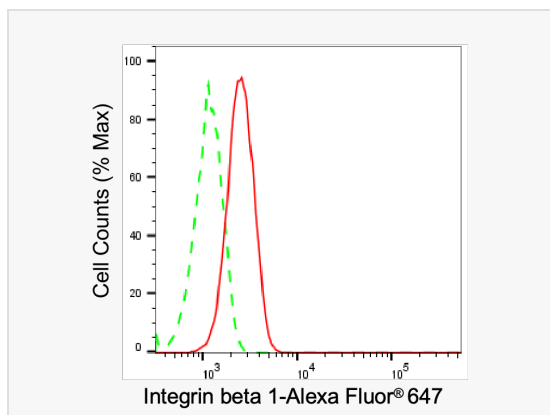
Catalog # R020369

### Product Information

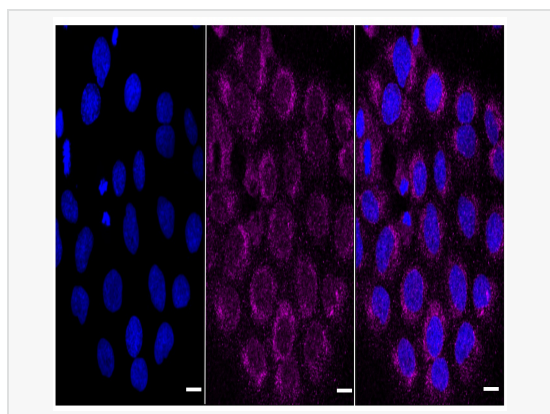
Application	WB, FC, IF (Cell)/ICC, IHC-P/IF (Tissue-P)
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000; IHC-P 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	34A30Q21
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Integrin beta 1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-ITGB1 Rabbit mAb [34A30Q21] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

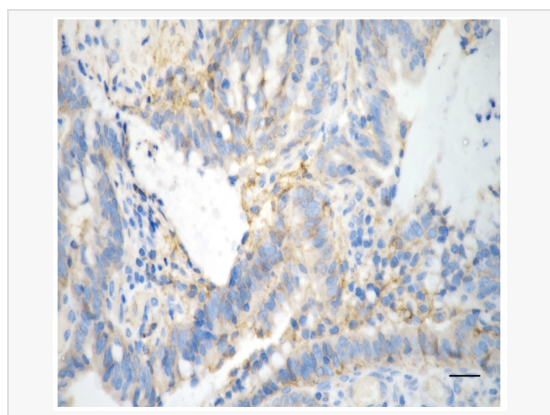
Synonyms	GPIIA; MSK12; CD29; FNRB; MDF2; Integrin, Beta 1 (Fibronectin Receptor, Beta Polypeptide, Antigen CD29 Includes MDF2, MSK12); Glycoprotein IIa; Integrin Beta-1; Very Late Activation Protein, Beta Polypeptide; Fibronectin Receptor Subunit Beta; Integrin VLA-4 Beta Subunit; VLA-4 Subunit Beta; Integrin Beta 1; CD29 Antigen; VLA-BETA; VLAB.
Calculated MW	Calculated MW: 88 kDa, Observed MW: 115/135 kDa
Uniprot ID	P05556
Gene ID	3688
Background	Integrins are $\alpha/\beta$ heterodimeric cell surface receptors that play a pivotal role in cell adhesion and migration, as well as in growth and survival. The integrin family contains at least 18 $\alpha$ and 8 $\beta$ subunits that form 24 known integrins with distinct tissue distribution and overlapping ligand specificities.



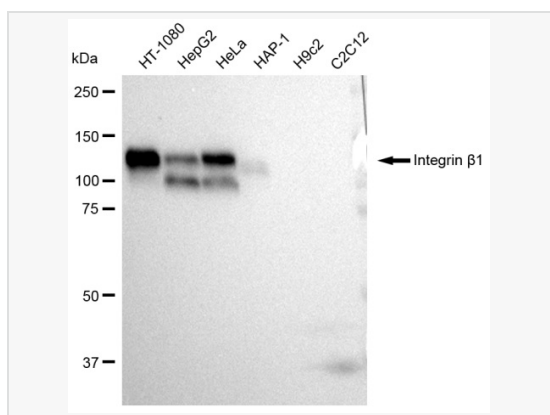
Flow cytometric analysis of Integrin beta 1 expression in HT-1080 cells using Integrin beta 1 antibody (R020369, 1:2,000). Green, isotype control; red, Integrin beta 1.



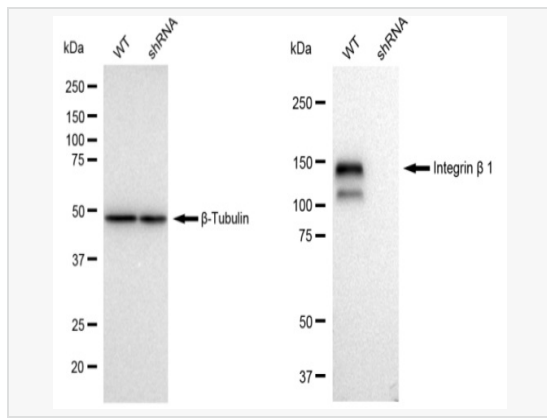
Immunocytochemical staining of HT-1080 cells with Integrin beta 1 antibody (R020369, 1:1,000). Nuclei were stained blue with DAPI; Integrin beta 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.



Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using integrin beta1 antibody (R020369, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40 $\times$  objective). Scale bar: 25  $\mu$ m.



Western blotting analysis using Integrin  $\beta$ 1 antibody (R020369). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Integrin  $\beta$ 1 antibody (R020369, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Integrin beta 1 antibody (R020369). Integrin beta 1 expression in wild type (WT) and Integrin beta 1 shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with Integrin beta 1 antibody (R020369, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.