bs-0486R **[Primary Antibody]**

Integrin beta 1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 3688 **SWISS:** P05556

Target: Integrin beta 1

Immunogen: KLH conjugated synthetic peptide derived from human Integrin beta 1: 25-100/798.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Integrins alpha-1/beta-1, alpha-2/beta-1, alpha-10/beta-1 and alpha-11/beta-1 are receptors for collagen. Integrins alpha-1/beta-1 and alpha-2/beta-2 recognize the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Integrins alpha-2/beta-1, alpha-3/beta-1, alpha-4/beta-1, alpha-5/beta-1, alpha-8/beta-1, alpha-10/beta-1, alpha-11/beta-1 and alpha-V/beta-1 are receptors for fibronectin. Alpha-4/beta-1 recognizes one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. Integrin alpha-5/beta-1 is a receptor for fibrinogen. Integrin alpha-1/beta-1, alpha-2/beta-1, alpha-6/beta-1 and alpha-7/beta-1 are receptors for lamimin. Integrin alpha-4/beta-1 is a receptor for VCAM1. It recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-9/beta-1 is a receptor for VCAM1, cytotactin and osteopontin. It recognizes the sequence A-E-I-D-G-I-E-L in cytotactin. Integrin alpha-3/beta-1 is a receptor for epiligrin, thrombospondin and CSPG4. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration. Integrin alpha-V/beta-1 is a receptor for vitronectin. Beta-1 integrins recognize the sequence R-G-D in a wide array of ligands. Isoform beta-1B interferes with isoform beta-1A resulting in a dominant negative effect on cell adhesion and migration (in vitro). In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

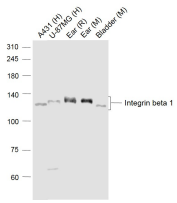
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1µg/Test)

Reactivity: Human, Mouse, Rat, Sheep (predicted: Rabbit, Pig, Cow, Chicken, Dog, Horse)

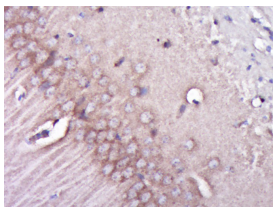
Predicted MW.: 88 kDa

Subcellular Location: Cell membrane ,Cytoplasm

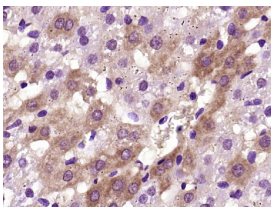
VALIDATION IMAGES



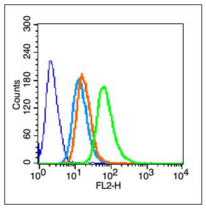
Sample: Lane 1: A431 (Human) Cell Lysate at 30 ug Lane 2: U-87MG (Human) Cell Lysate at 30 ug Lane 3: Ear (Rat) Lysate at 40 ug Lane 4: Ear (Mouse) Lysate at 40 ug Lane 5: Bladder (Mouse) Lysate at 40 ug Primary: Anti-Integrin beta 1 (bs-0486R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 130 kD Observed band size: 130 kD



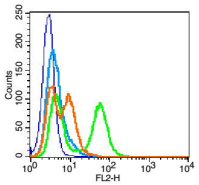
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Integrin beta 1) Polyclonal Antibody, Unconjugated (bs-0486R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Integrin beta 1) Polyclonal Antibody, Unconjugated (bs-0486R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control (blue line): Hela (blue). Primary Antibody (green line): Rabbit Anti-Integrin beta 1 antibody (bs-0486R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE Dilution: 1μg /test. Protocol The cells were fixed with 70% methanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control: HUVEC cells(blue). Primary Antibody:Rabbit Anti-CD29 antibody(bs-0486R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 2% paraformaldehyde (10 min) .Primary antibody (bs-0486R, 1μg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=12.958]** Jiao, Yongjie. et al. Constructing Nanoscale Topology on the Surface of Microfibers Inhibits Fibroblast Fibrosis. Advanced Fiber Materials. 2022 Jun;:1-14 IF ;Human. 10.1007/s42765-022-00165-4
- **[IF=13.1]** Weiguang Zhao. et al. Biomimetic multilayer scaffolds with prolonged retention of stem cells-recruiting and angiogenic peptides for promoting bladder regeneration. COMPOSITES PART B-ENGINEERING. 2024 May;277:111409 IF ;Human. 10.1016/j.compositesb.2024.111409
- **[IF=9.933]** Laijun Liu. et al. Hierarchical Nanostructured Electrospun Membrane with Periosteum-Mimic Microenvironment for Enhanced Bone Regeneration. 2021 Aug 05 IF ;Rat. 34350724
- **[IF=10]** Yongjie Jiao. et al. Cobweb-Inspired Micro/Nanostructured Scaffolds for Soft Tissue Regeneration with Inhibition Effect of Fibrosis under Dynamic Environment. ADV HEALTHC MATER. 2023 Sep;:2300997 IF ;Human. 37713107
- **[IF=8.352]** Chanjuan Dong. et al. Graphene-based conductive fibrous scaffold boosts sciatic nerve regeneration and functional recovery upon electrical stimulation. Appl Mater Today. 2020 Dec;21:100870 IHC ;Rat. 10.1016/j.apmt.2020.100870