

Integrin β1 (PT0512R) PT® Rabbit mAb

YM8338 Catalog No:

Reactivity: Human; Mouse; Rat;

Applications: WB;IHC;IF;IP;ELISA

Target: Integrin β1

Fields: >>Rap1 signaling pathway;>>Phagosome;>>PI3K-Akt signaling

pathway;>>Axon guidance;>>Focal adhesion;>>ECM-receptor interaction;>>Cell

adhesion molecules;>>Tight junction;>>Platelet activation;>>Leukocyte transendothelial migration;>>Regulation of actin cytoskeleton;>>Bacterial

invasion of epithelial cells;>>Pathogenic Escherichia coli

infection;>>Shigellosis;>>Pertussis;>>Yersinia

infection;>>Leishmaniasis;>>Toxoplasmosis;>>Human papillomavirus infection;>>Pathways in cancer;>>Proteoglycans in cancer;>>Small cell lung cancer;>>Hypertrophic cardiomyopathy;>>Arrhythmogenic right ventricular

cardiomyopathy;>>Dilated cardiomyopathy

Gene Name: ITGB1

Protein Name: Integrin beta-1

Human Gene Id: 3688

Human Swiss Prot

P05556

No:

Mouse Gene Id: 16412

Mouse Swiss Prot

P09055

No:

Rat Gene Id: 24511

Rat Swiss Prot No: P49134

Specificity: endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA



Source : Monoclonal, rabbit, IgG, Kappa

Dilution: IHC 1:2000-1:10000;WB 1:2000-1:10000;IF 1:200-1:1000;ELISA

1:5000-1:20000;IP 1:50-1:200;

Purification: Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 88kD

Observed Band: 115-125kD

Cell Pathway: Axon guidance; Focal adhesion; ECM-receptor interaction; Cell adhesion

molecules (CAMs);Leukocyte transendothelial migration;Regulates Actin and

Cytoskeleton;Pathogenic Escherichia coli infection;Pathway

Background: Integrins are heterodimeric proteins made up of alpha and beta subunits. At

least 18 alpha and 8 beta subunits have been described in mammals. Integrin family members are membrane receptors involved in cell adhesion and

recognition in a variety of processes including embryogenesis, hemostasis, tissue repair, immune response and metastatic diffusion of tumor cells. This gene encodes a beta subunit. Multiple alternatively spliced transcript variants which encode different protein isoforms have been found for this gene. [provided by

RefSeq, Jul 2008],

Function: function: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-ID-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 cytotacti

Subcellular Location:

Membrane

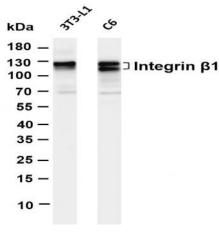
Expression:

[Isoform 1]: Widely expressed, other isoforms are generally coexpressed with a more restricted distribution.; [Isoform 2]: Expressed in skin, liver, skeletal muscle, cardiac muscle, placenta, umbilical vein endothelial cells, neuroblastoma cells, lymphoma cells, hepatoma cells and astrocytoma cells.; [Isoform 3]: Together with isoform 4, is expressed in muscle, kidney, liver, placenta, cervical epithelium, umbilical vein endothelial cells, fibroblast cells, embryonal kidney cells, platelets

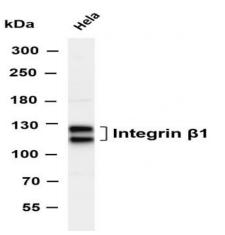


and several blood cell lines. Expressed in non-proliferating and differentiated prostate gland epithelial cells and in platelets, on the surface of erythroleukemia cells and in various hematopoietic cell lines.; [Isoform 4]: Together with isoform 3, is expressed in muscle, kidney, liver, placenta, ce

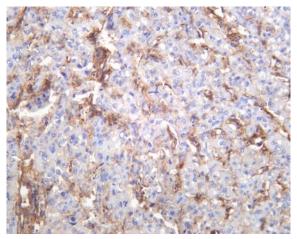
Products Images



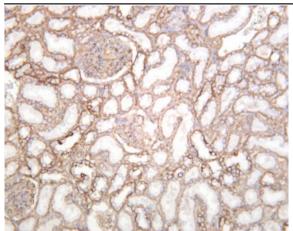
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with ant-Integrin $\beta 1$ (PT0512R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H $_{\rm H}$ L) antibody was used to detect the antibody. Lane 1: 3T3-L1 Lane 2: C6 Predicted band size: 88kDa Observed band size: 115-125kDa



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-Integrin $\beta 1$ (PT0512R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Predicted band size: 88kDa Observed band size: 115-125kDa



Human hepatocellular carcinoma was stained with anti-Integrin β1 (PT0512R) rabbit antibody



Rat kidney was stained with anti-Integrin $\beta1$ (PT0512R) rabbit antibody