

## Integrin a5 Monoclonal Antibody

Catalog No: YM1054

**Reactivity:** Human; Mouse; Rat; Bovine

**Applications:** WB;FCM

Target: Integrin α5

Fields: >>Phagosome;>>Pl3K-Akt signaling pathway;>>Focal adhesion;>>ECM-

receptor interaction;>>Hematopoietic cell lineage;>>Regulation of actin

cytoskeleton;>>Bacterial invasion of epithelial

cells;>>Shigellosis;>>Pertussis;>>Yersinia infection;>>Human papillomavirus

infection;>>Herpes simplex virus 1 infection;>>Proteoglycans in

cancer;>>MicroRNAs in cancer;>>Hypertrophic

cardiomyopathy;>>Arrhythmogenic right ventricular cardiomyopathy;>>Dilated

cardiomyopathy

Gene Name: ITGA5

Protein Name: Integrin alpha-5

Human Gene Id: 3678

**Human Swiss Prot** 

No:

Mouse Gene Id: 16402

**Mouse Swiss Prot** 

No:

**Immunogen :** Purified recombinant human Integrin α5 (N-terminus) protein fragments

expressed in E.coli.

**Specificity:** Integrin α5 Monoclonal Antibody detects endogenous levels of Integrin α5

protein.

P08648

P11688

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

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**Dilution:** WB 1:1000 - 1:2000. Flow cytometry: 1:100 - 1:200. Not yet tested in other

applications.

**Purification :** Affinity purification

Concentration: 1 mg/ml

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

Molecularweight: 115kD

**Cell Pathway:** Focal adhesion;ECM-receptor interaction;Hematopoietic cell lineage;Regulates

Actin and Cytoskeleton; Hypertrophic cardiomyopathy (HCM); Arrhythmogenic

right ventricular cardiomyopathy (ARVC); Dilated car

**Background:** integrin subunit alpha 5(ITGA5) Homo sapiens The product of this gene belongs

to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha subunit and a beta subunit that function in cell surface adhesion and signaling. The encoded preproprotein is proteolytically processed to generate light and heavy chains that comprise the alpha 5 subunit. This subunit associates with the beta 1 subunit to form a fibronectin receptor. This integrin may promote tumor invasion, and higher expression of this gene may be correlated with shorter survival time in lung cancer patients. Note that the integrin alpha 5 and integrin alpha V subunits are encoded by distinct genes. [provided by

RefSeq, Oct 2015],

**Function:** function:Integrin alpha-5/beta-1 is a receptor for fibronectin and fibrinogen. It

recognizes the sequence R-G-D in its ligands. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in

Kaposi's sarcoma lesions., similarity: Belongs to the integrin alpha chain

family.,similarity:Contains 7 FG-GAP repeats.,subunit:Heterodimer of an alpha and a beta subunit. The alpha subunit is composed of an heavy and a light chain linked by a disulfide bond. Alpha-5 associates with beta-1. Interacts with HPS5

and NISCH. Interacts with HIV-1 Tat. Interacts with RAB21.,

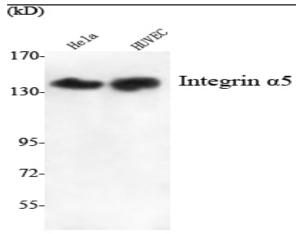
Subcellular Location:

 $\label{thm:lembrane} \mbox{Membrane; Single-pass type I membrane protein. Cell junction, focal adhesion} \; .$ 

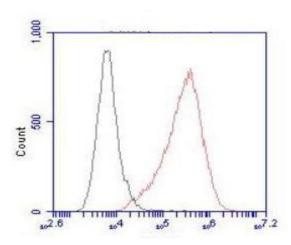
Cell surface.

**Expression :** Liver, Placenta,

## **Products Images**



Western Blot analysis using Integrin  $\alpha 5$  Monoclonal Antibody against HeLa, HUVEC cell lysate.



Flow cytometric analysis of HeLa cells stained with Integrin  $\alpha 5$  Monoclonal Antibody (red), followed by FITC-conjugated goat anti-mouse IgG. Black line histogram represents the isotype control, normal mouse IgG.