

# Integrin $\alpha$ IIb (H-160): sc-15328

## BACKGROUND

Integrins are heterodimers composed of non-covalently associated transmembrane  $\alpha$  and  $\beta$  subunits. The 16  $\alpha$  and 8  $\beta$  subunits heterodimerize to produce more than 20 different receptors. Most integrin receptors bind ligands that are components of the extracellular matrix, including Fibronectin, collagen and Vitronectin. Certain integrins can also bind to soluble ligands such as Fibrinogen, or to counterreceptors on adjacent cells such as the intracellular adhesion molecules (ICAMs), leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrin-mediated responses. In addition to mediating cell adhesion and cytoskeletal organization, integrins function as signaling receptors. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis.

## REFERENCES

- Hynes, R.O. 1992. Integrins: versatility, modulation, and signaling in cell adhesion. *Cell* 69: 11-25.
- Miyamoto, S., et al. 1995. Synergistic roles for receptor occupancy and aggregation in integrin transmembrane function. *Science* 267: 883-885.

## CHROMOSOMAL LOCATION

Genetic locus: ITGA2B (human) mapping to 17q21.31; Itga2b (mouse) mapping to 11 E1.

## SOURCE

Integrin  $\alpha$ IIb (H-160) is a rabbit polyclonal antibody raised against amino acids 847-1006 mapping near the C-terminus of Integrin  $\alpha$ IIb of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Integrin  $\alpha$ IIb (H-160) is recommended for detection of Integrin  $\alpha$ IIb heavy and light chain of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin  $\alpha$ IIb siRNA (h): sc-43554, Integrin  $\alpha$ IIb siRNA (m): sc-45927, Integrin  $\alpha$ IIb shRNA Plasmid (h): sc-43554-SH, Integrin  $\alpha$ IIb shRNA Plasmid (m): sc-45927-SH, Integrin  $\alpha$ IIb shRNA (h) Lentiviral Particles: sc-43554-V and Integrin  $\alpha$ IIb shRNA (m) Lentiviral Particles: sc-45927-V.

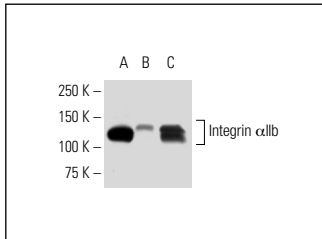
Molecular Weight of Integrin  $\alpha$ IIb: 136 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, MEG-01 cell lysate: sc-2283 or human platelet whole cell lysate: sc-363773.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



Integrin  $\alpha$ IIb (H-160): sc-15328. Western blot analysis of Integrin  $\alpha$ IIb expression in human platelets (A), MEG-01 (B) and HEL 92.1.7 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Denis, M.M., et al. 2005. Escaping the nuclear confines: signal-dependent pre-mRNA splicing in anucleate platelets. *Cell* 122: 379-391.
- Mitchell, W.B., et al. 2006.  $\alpha$ IIb $\beta$ 3 biogenesis is controlled by engagement of  $\alpha$ IIb in the calnexin cycle via the N15-linked glycan. *Blood* 107: 2713-2719.
- Takahashi, S., et al. 2008. Platelet responsiveness to *in vitro* aspirin is independent of COX-1 and COX-2 protein levels and polymorphisms. *Thromb. Res.* 121: 509-517.
- McCarran, D.J., et al. 2008. Survivin overexpression alone does not alter megakaryocyte ploidy nor interfere with erythroid/megakaryocytic lineage development in transgenic mice. *Blood* 111: 4092-4095.
- Foulks, J.M., et al. 2009. PAF-acetylhydrolase expressed during megakaryocyte differentiation inactivates PAF-like lipids. *Blood* 113: 6699-6706.
- McCarran, D.J., et al. 2009. Differential expression of NADPH oxidases in megakaryocytes and their role in polyploidy. *Blood* 114: 1243-1249.
- Ahrabi, A.K., et al. 2010. Glomerular and proximal tubule cysts as early manifestations of Pkd1 deletion. *Nephrol. Dial. Transplant.* 25: 1067-1078.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.


 MONOS  
Satisfaction  
Guaranteed

Try **Integrin  $\alpha$ IIb (B-9): sc-365938** or **Integrin  $\alpha$ IIb (A-7): sc-373992**, our highly recommended monoclonal alternatives to Integrin  $\alpha$ IIb (H-160). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Integrin  $\alpha$ IIb (B-9): sc-365938**.