

# Integrin $\alpha$ IIb (96-2C1): sc-21773

## BACKGROUND

Integrins are heterodimers composed of noncovalently 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

1. Hynes, R.O. 1992. Integrins: versatility, modulation, and signaling in cell adhesion. *Cell* 69: 11-25.
2. 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 (96-2C1) is a mouse monoclonal antibody raised against Integrin  $\alpha$ IIb from PBL cells of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin  $\alpha$ IIb (96-2C1) is available conjugated to either phycoerythrin (sc-21773 PE) or fluorescein (sc-21773 FITC), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM.

## APPLICATIONS

Integrin  $\alpha$ IIb (96-2C1) is recommended for detection of Integrin  $\alpha$ IIb 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)] and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

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.

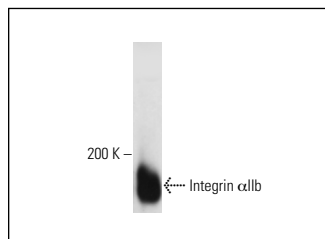
Molecular Weight of Integrin  $\alpha$ IIb: 136 kDa.

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

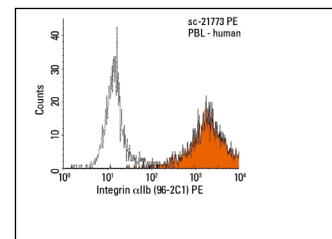
## STORAGE

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 (96-2C1): sc-21773. Western blot analysis of Integrin  $\alpha$ IIb expression in human PBL whole cell lysate under non-reducing conditions.



Integrin  $\alpha$ IIb (96-2C1) PE: sc-21773 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG<sub>1</sub>-PE: sc-2866.

## SELECT PRODUCT CITATIONS

1. Abdenmour, S., et al. 2014. A case of malignant amygdaloid cyst. *Rev. Stomatol. Chir. Maxillofac. Chir. Orale* 115: 385-388.
2. Zhou, M., et al. 2015. Rosiglitazone modulates collagen deposition and metabolism in atherosclerotic plaques of fat-fed ApoE-knockout mice. *Exp. Ther. Med.* 10: 1265-1270.
3. Zhang, W., et al. 2015. Additive effects of eukaryotic co-expression plasmid carrying GRIM-19 and LKB1 genes on breast cancer *in vitro* and *in vivo*. *Mol. Med. Rep.* 12: 7665-7672.
4. Li, M., et al. 2015. Enhanced antitumor effect of cisplatin in human oral squamous cell carcinoma cells by tumor suppressor GRIM-19. *Mol. Med. Rep.* 12: 8185-8192.
5. Chang, L., et al. 2016. Combined RNAi targeting human Stat3 and ADAM9 as gene therapy for non-small cell lung cancer. *Oncol. Lett.* 11: 1242-1250.
6. Graça, A.L., et al. 2022. Controlling the fate of regenerative cells with engineered platelet-derived extracellular vesicles. *Nanoscale* 14: 6543-6556.
7. Zhang, H., et al. 2024. Zixue Powder attenuates septic thrombosis via reducing neutrophil extracellular trap through blocking platelet STING activation. *J. Ethnopharmacol.* 331: 118337.

## RESEARCH USE

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



See **Integrin  $\alpha$ IIb (B-9): sc-365938** for Integrin  $\alpha$ IIb antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.