

Integrin α IIb (C-20): sc-6602

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16 α and 8 β 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.

CHROMOSOMAL LOCATION

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

SOURCE

Integrin α IIb (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Integrin α IIb of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6602 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Integrin α IIb (C-20) is recommended for detection of Integrin α IIb light chain of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 α IIb siRNA (h): sc-43554, Integrin α IIb siRNA (m): sc-45927, Integrin α IIb shRNA Plasmid (h): sc-43554-SH, Integrin α IIb shRNA Plasmid (m): sc-45927-SH, Integrin α IIb shRNA (h) Lentiviral Particles: sc-43554-V and Integrin α IIb shRNA (m) Lentiviral Particles: sc-45927-V.

Molecular Weight of Integrin α IIb: 136 kDa.

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

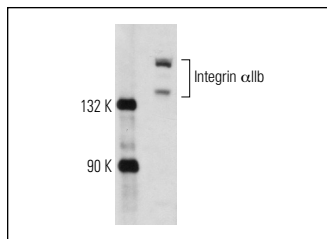
RESEARCH USE

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

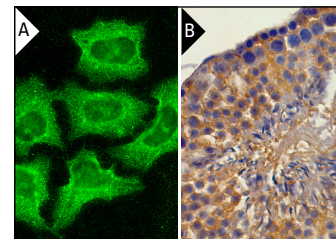
STORAGE

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

DATA



Integrin α IIb (C-20): sc-6602. Western blot analysis of Integrin α IIb expression in HEL 92.1.7 whole cell lysate.



Integrin α IIb (C-20): sc-6602. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse testis showing membrane localization (B).

SELECT PRODUCT CITATIONS

1. Kuebler, W.M., et al. 1999. Pressure is proinflammatory in lung venular capillaries. *J. Clin. Invest.* 104: 495-502.
2. Tucker, K.L., et al. 2008. A dual role for integrin linked kinase in platelets: regulating integrin function and α -granule secretion. *Blood* 112: 4523-4531.
3. Galindo, M., et al. 2009. Immunohistochemical detection of intravascular platelet microthrombi in patients with lupus nephritis and anti-phospholipid antibodies. *Rheumatology* 48: 1003-1007.
4. Tucker, K.L., et al. 2009. Proteomic analysis of resting and thrombin-stimulated platelets reveals the translocation and functional relevance of HIP-55 in platelets. *Proteomics* 9: 4340-4354.
5. Balduini, A., et al. 2011. *In vitro* megakaryocyte differentiation and proplatelet formation in Ph-negative classical myeloproliferative neoplasms: distinct patterns in the different clinical phenotypes. *PLoS One* 6: e21015.
6. Balduini, A., et al. 2011. Megakaryocytes derived from patients with the classical form of Bernard-Soulier syndrome show no ability to extend proplatelets *in vitro*. *Platelets* 22: 308-311.
7. Bury, L., et al. 2012. Outside-in signalling generated by a constitutively activated integrin α IIb β 3 impairs proplatelet formation in human megakaryocytes. *PLoS One* 7: e34449.
8. Balduini, A., et al. 2012. Constitutively released adenosine diphosphate regulates proplatelet formation by human megakaryocytes. *Haematologica* 97: 1657-1665.



Try **Integrin α IIb (B-9): sc-365938** or **Integrin α IIb (A-7): sc-373992**, our highly recommended monoclonal alternatives to Integrin α IIb (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Integrin α IIb (B-9): sc-365938**.