

p-Integrin β 3 (pY759.7A): sc-136458

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, but can also bind to soluble ligands or to counterreceptors on adjacent cells, thereby leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors. 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. GRB2 binds Integrin β 3 only when both Tyr 747 and Tyr 759 are phosphorylated. However, SHC binds the monophosphorylated Integrin β 3 at Tyr 759, suggesting that tyrosine phosphorylation of Integrin β 3 may be important in initiating outside-in signaling cascades by inducing association of signaling components directly with Integrin.

CHROMOSOMAL LOCATION

Genetic locus: ITGB3 (human) mapping to 17q21.32; Itgb3 (mouse) mapping to 11 E1.

SOURCE

p-Integrin β 3 (pY759.7A) is a mouse monoclonal antibody raised against a short amino acid sequence containing Tyr 759 phosphorylated Integrin β 3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p-Integrin β 3 (pY759.7A) is available conjugated to agarose (sc-136458 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-136458 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA.

APPLICATIONS

p-Integrin β 3 (pY759.7A) is recommended for detection of Tyr 759 phosphorylated Integrin β 3 of human origin and correspondingly Tyr 758 phosphorylated Integrin β 3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for Integrin β 3 siRNA (h): sc-29375, Integrin β 3 siRNA (m): sc-35677, Integrin β 3 siRNA (r): sc-63292, Integrin β 3 shRNA Plasmid (h): sc-29375-SH, Integrin β 3 shRNA Plasmid (m): sc-35677-SH, Integrin β 3 shRNA Plasmid (r): sc-63292-SH, Integrin β 3 shRNA (h) Lentiviral Particles: sc-29375-V, Integrin β 3 shRNA (m) Lentiviral Particles: sc-35677-V and Integrin β 3 shRNA (r) Lentiviral Particles: sc-63292-V.

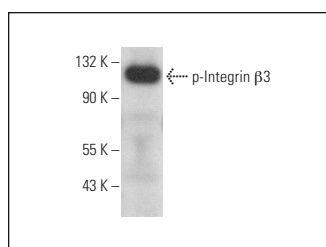
Molecular Weight of p-Integrin β 3: 125 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270 or HeLa + pervanadate cell lysate: sc-24688.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048.

DATA



p-Integrin β 3 (pY759.7A): sc-136458. Western blot analysis of Integrin β 3 phosphorylation in HEL 92.1.7 whole cell lysate.

SELECT PRODUCT CITATIONS

- Mitrugno, A., et al. 2014. A novel and essential role for Fc γ R11a in cancer cell-induced platelet activation. *Blood* 123: 249-260.
- Corti, F., et al. 2019. N-terminal Syndecan-2 domain selectively enhances 6-O heparan sulfate chains sulfation and promotes VEGFA165-dependent neovascularization. *Nat. Commun.* 10: 1562.
- Zheng, L., et al. 2020. Blocking cellular N-glycosylation suppresses human cytomegalovirus entry in human fibroblasts. *Microb. Pathog.* 138: 103776.
- Kingston, R., et al. 2021. Serotonin transporter-mediated molecular axis regulates regional retinal ganglion cell vulnerability and axon regeneration after nerve injury. *PLoS Genet.* 17: e1009885.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.