SANTA CRUZ BIOTECHNOLOGY, INC.

Integrin α6 (BQ16): sc-13542

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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: ITGA6 (human) mapping to 2q31.1.

SOURCE

Integrin α6 (BQ16) is a mouse monoclonal antibody raised against UM-UC-9 bladder cancer cell line of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin α6 (BQ16) is available conjugated to agarose (sc-13542 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-13542 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-13542 PE), fluorescein (sc-13542 FITC), Alexa Fluor® 488 (sc-13542 AF488), Alexa Fluor® 546 (sc-13542 AF546), Alexa Fluor® 594 (sc-13542 AF594) or Alexa Fluor® 647 (sc-13542 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-13542 AF680) or Alexa Fluor® 790 (sc-13542 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Integrin α6 (BQ16) is recommended for detection of Integrin α6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin α6 siRNA (h): sc-43129, Integrin α6 shRNA Plasmid (h): sc-43129-SH and Integrin α6 shRNA (h) Lentiviral Particles: sc-43129-V.

Molecular Weight of Integrin α6 proform: 140 kDa.

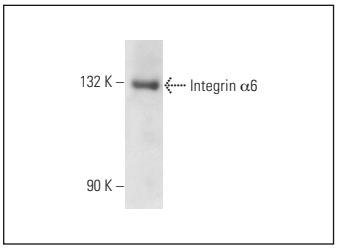
Molecular Weight of Integrin α6 heavy chain: 120 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, Hep G2 cell lysate: sc-2227 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

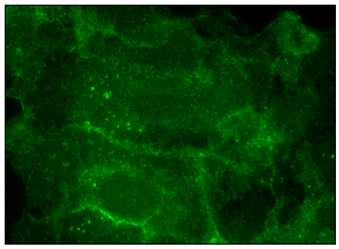
STORAGE

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

DATA



Integrin α6 (BQ16): sc-13542. Western blot analysis of Integrin α6 expression in Hep G2 whole cell lysate.



Integrin α6 (BQ16): sc-13542. Immunofluorescence staining of methanol-fixed Hep G2 cells showing membrane localization.

SELECT PRODUCT CITATIONS

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4. Ishii, K., et al. 2011. Involvement of epithelial-mesenchymal transition in adenoid cystic carcinoma metastasis. Int. J. Oncol. 38: 921-931.
5. Seo, H.S., et al. 2015. Identification of biomarkers regulated by rexinoids (LGD1069, LG100268 and Ro25-7386) in human breast cells using Affymetrix microarray. Mol. Med. Rep. 12: 800-818.
6. Zhang, C., et al. 2018. Therapeutic effect of dental pulp stem cell transplantation on a rat model of radioactivity-induced esophageal injury. Cell Death Dis. 9: 738.
7. Saemisch, M., et al. 2019. Subendothelial matrix components influence endothelial cell apoptosis *in vitro*. Am. J. Physiol., Cell Physiol. 316: C210-C222.
8. Wang, C., et al. 2020. Secreted pyruvate kinase M2 promotes lung cancer metastasis through activating the Integrin β1/FAK signaling pathway. Cell Rep. 30: 1780-1797.
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RESEARCH USE

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