

# Integrin $\alpha 6$ (BQ16): sc-13542

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Integrin  $\alpha 6$  (BQ16) is a mouse monoclonal antibody raised against UM-UC-9 bladder cancer cell line 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  $\alpha 6$  (BQ16) is available conjugated to agarose (sc-13542 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-13542 HRP), 200  $\mu$ g/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  $\mu$ g/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  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Integrin  $\alpha 6$  (BQ16) is recommended for detection of Integrin  $\alpha 6$  of 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), flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin  $\alpha 6$  siRNA (h): sc-43129, Integrin  $\alpha 6$  shRNA Plasmid (h): sc-43129-SH and Integrin  $\alpha 6$  shRNA (h) Lentiviral Particles: sc-43129-V.

Molecular Weight of Integrin  $\alpha 6$  proform: 140 kDa.

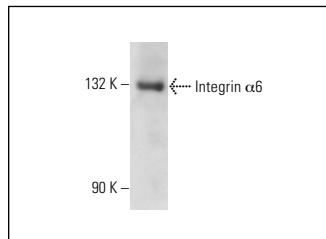
Molecular Weight of Integrin  $\alpha 6$  heavy chain: 120 kDa.

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

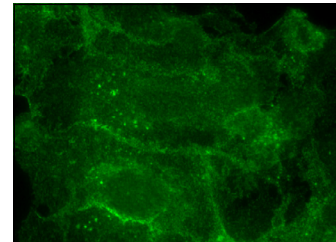
## STORAGE

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

## DATA



Integrin  $\alpha 6$  (BQ16): sc-13542. Western blot analysis of Integrin  $\alpha 6$  expression in Hep G2 whole cell lysate.



Integrin  $\alpha 6$  (BQ16): sc-13542. Immunofluorescence staining of methanol-fixed Hep G2 cells showing membrane localization.

## SELECT PRODUCT CITATIONS

1. Pass, H.I., et al. 2004. Gene expression profiles predict survival and progression of pleural mesothelioma. *Clin. Cancer Res.* 10: 849-859.
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3. Nishikawa, T., et al. 2010. Antiangiogenic effect of a selective 5-HT4 receptor agonist. *J. Surg. Res.* 159: 696-704.
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.
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8. Wang, C., et al. 2020. Secreted pyruvate kinase M2 promotes lung cancer metastasis through activating the Integrin  $\beta 1$ /FAK signaling pathway. *Cell Rep.* 30: 1780-1797.
9. Liu, Z., et al. 2021. Dietary supplementation of huangshan maofeng green tea preventing hypertension of older C57BL/6 mice induced by desoxycorticosterone acetate and salt: green tea preventing senior hypertension. *J. Nutr. Biochem.* 88: 108530.

## RESEARCH USE

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