

Integrin $\beta 5$ (H-96): sc-14010

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16α and 8β 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 counter receptors 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: ITGB5 (human) mapping to 3q21.2; Itgb5 (mouse) mapping to 16 B3.

SOURCE

Integrin $\beta 5$ (H-96) is a rabbit polyclonal antibody raised against amino acids 635-730 mapping near the C-terminus of Integrin $\beta 5$ 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.

APPLICATIONS

Integrin $\beta 5$ (H-96) is recommended for detection of Integrin $\beta 5$ 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).

Integrin $\beta 5$ (H-96) is also recommended for detection of Integrin $\beta 5$ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Integrin $\beta 5$ siRNA (h): sc-35680, Integrin $\beta 5$ siRNA (m): sc-35681, Integrin $\beta 5$ shRNA Plasmid (h): sc-35680-SH, Integrin $\beta 5$ shRNA Plasmid (m): sc-35681-SH, Integrin $\beta 5$ shRNA (h) Lentiviral Particles: sc-35680-V and Integrin $\beta 5$ shRNA (m) Lentiviral Particles: sc-35681-V.

Molecular Weight of Integrin $\beta 5$: 100 kDa.

Positive Controls: SW480 cell lysate: sc-2219, A549 cell lysate: sc-2413 or HeLa whole cell lysate: sc-2200.

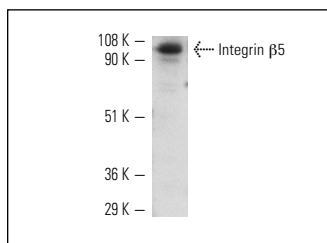
STORAGE

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

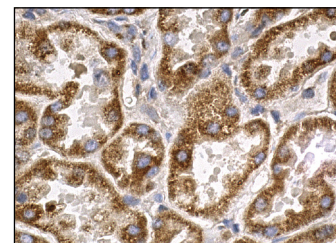
RESEARCH USE

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

DATA



Integrin $\beta 5$ (H-96): sc-14010. Western blot analysis of Integrin $\beta 5$ expression in SW480 whole cell lysate.



Integrin $\beta 5$ (H-96): sc-14010. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

SELECT PRODUCT CITATIONS

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- Vives-Bauza, C., et al. 2008. The age lipid A2E and mitochondrial dysfunction synergistically impair phagocytosis by retinal pigment. *J. Biol. Chem.* 283: 24770-24780.
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- Yu, C.C., et al. 2012. Dietary antioxidants prevent age-related retinal pigment epithelium actin damage and blindness in mice lacking $\alpha v\beta 5$ integrin. *Free Radic. Biol. Med.* 52: 660-670.
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