

# Integrin $\alpha 5$ (H-104): sc-10729

## BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits. The 16  $\alpha$  and eight  $\beta$  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: ITGA5 (human) mapping to 12q13.13; Itga5 (mouse) mapping to 15 F3.

## SOURCE

Integrin  $\alpha 5$  (H-104) is a rabbit polyclonal antibody raised against amino acids 840-943 of Integrin  $\alpha 5$  of human origin.

## PRODUCT

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

## APPLICATIONS

Integrin  $\alpha 5$  (H-104) is recommended for detection of Integrin  $\alpha 5$  of mouse, rat and 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), 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  $\alpha 5$  (H-104) is also recommended for detection of Integrin  $\alpha 5$  in additional species, including equine.

Suitable for use as control antibody for Integrin  $\alpha 5$  siRNA (h): sc-29372, Integrin  $\alpha 5$  siRNA (m): sc-35687, Integrin  $\alpha 5$  shRNA Plasmid (h): sc-29372-SH, Integrin  $\alpha 5$  shRNA Plasmid (m): sc-35687-SH, Integrin  $\alpha 5$  shRNA (h) Lentiviral Particles: sc-29372-V and Integrin  $\alpha 5$  shRNA (m) Lentiviral Particles: sc-35687-V.

Molecular Weight of Integrin  $\alpha 5$ : 150 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232, SK-MEL-28 cell lysate: sc-2236 or C32 whole cell lysate: sc-2205.

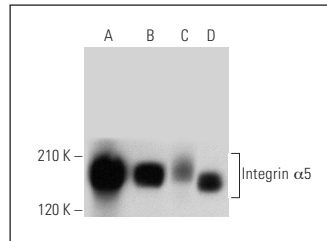
## STORAGE

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

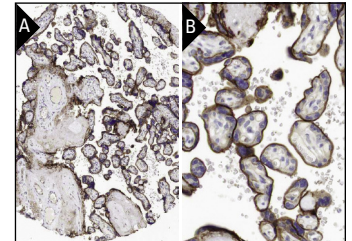
## RESEARCH USE

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

## DATA



Integrin  $\alpha 5$  (H-104): sc-10729. Western blot analysis of Integrin  $\alpha 5$  expression in MDA-MB-231 (A), SK-MEL-28 (B), C32 (C) and BT-20 (D) whole cell lysates.



Integrin  $\alpha 5$  (H-104): sc-10729. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane and cytoplasmic staining of decidual and trophoblastic cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

## SELECT PRODUCT CITATIONS

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Try **Integrin  $\alpha 5$  (C-9): sc-376199** or **Integrin  $\alpha 5$  (A-11): sc-166665**, our highly recommended monoclonal alternatives to Integrin  $\alpha 5$  (H-104). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Integrin  $\alpha 5$  (C-9): sc-376199**.