

Integrin α 11 (H-242): sc-98740

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits, which heterodimerize to produce more than 20 different receptors. Most Integrin receptors bind ligands that are components of the extracellular matrix, including Fibronectin, collagen (COL) 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 cellular aggregation. Integrin α 11, also known as ITGA11 or MSTP018, is a 1,189 amino acid single-pass type I membrane protein that contains one WWFA domain and seven FG-GAP repeats. Expressed at high levels in heart and uterus and present at lower levels in pancreas, kidney, skeletal muscle, placenta, lung, colon and brain, Integrin α 11 exists as a heterodimer with Integrin β 1 and functions as a receptor for collagen.

REFERENCES

- Lehnert, K., Ni, J., Leung, E., Gough, S.M., Weaver, A., Yao, W.P., Liu, D., Wang, S.X., Morris, C.M. and Krissansen, G.W. 1999. Cloning, sequence analysis and chromosomal localization of the novel human Integrin α 11 subunit (ITGA11). *Genomics* 60: 179-187.
- Velling, T., Kusche-Gullberg, M., Sejersen, T. and Gullberg, D. 1999. cDNA cloning and chromosomal localization of human α (11) Integrin. A collagen-binding, I domain-containing, β 1-associated Integrin α -chain present in muscle tissues. *J. Biol. Chem.* 274: 25735-25742.
- Online Mendelian Inheritance in Man, OMIM[™]. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604789. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Tiger, C.F., Fougereousse, F., Grundström, G., Velling, T. and Gullberg, D. 2001. α 11 β 1 Integrin is a receptor for interstitial collagens involved in cell migration and collagen reorganization on mesenchymal nonmuscle cells. *Dev. Biol.* 237: 116-129.
- Zhang, W.M., Popova, S.N., Bergman, C., Velling, T., Gullberg, M.K. and Gullberg, D. 2002. Analysis of the human Integrin α 11 gene (ITGA11) and its promoter. *Matrix Biol.* 21: 513-523.

CHROMOSOMAL LOCATION

Genetic locus: ITGA11 (human) mapping to 15q23; Itga11 (mouse) mapping to 9 B.

SOURCE

Integrin α 11 (H-242) is a rabbit polyclonal antibody raised against amino acids 913-1151 mapping within an internal region of Integrin α 11 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.

STORAGE

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

APPLICATIONS

Integrin α 11 (H-242) is recommended for detection of Integrin α 11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

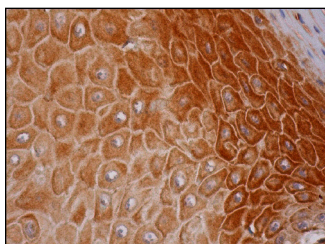
Suitable for use as control antibody for Integrin α 11 siRNA (h): sc-90047, Integrin α 11 siRNA (m): sc-105578, Integrin α 11 shRNA Plasmid (h): sc-90047-SH, Integrin α 11 shRNA Plasmid (m): sc-105578-SH, Integrin α 11 shRNA (h) Lentiviral Particles: sc-90047-V and Integrin α 11 shRNA (m) Lentiviral Particles: sc-105578-V.

Molecular Weight of Integrin α 11: 145 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Integrin α 11 (H-242): sc-98740. Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of squamous epithelial cells.

RESEARCH USE

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



Try **Integrin α 11 (F-5): sc-390091**, our highly recommended monoclonal alternative to Integrin α 11 (H-242).