SANTA CRUZ BIOTECHNOLOGY, INC.

ITFG2 (H-300): sc-134686



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 (COL) 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. ITFG2 (integrin- α FG-GAP repeats, a motif commonly found in integrin proteins.

REFERENCES

- 1. Hynes, R.O. 1992. Integrins: versatility, modulation and signaling in cell adhesion. Cell 69: 11-25.
- Miyamoto, S., Akiyama, S.K. and Yamada, K.M. 1995. Synergistic roles for receptor occupancy and aggregation in integrin transmembrane function. Science 267: 883-885.
- Clark, E.A. and Brugge, J.S. 1995. Integrins and signal transduction pathways: the road taken. Science 268: 233-239.
- 4. Sheppard, D. 1996. Epithelial integrins. Bioessays 18: 655-660.
- Juliano, R. 1996. Cooperation between soluble factors and integrin-mediated cell anchorage in the control of cell growth and differentiation. Bioessays 18: 911-917.
- Ewing, R.M., Chu, P., Elisma, F., Li, H., Taylor, P., Climie, S., McBroom-Cerajewski, L., Robinson, M.D., O'Connor, L., Li, M., Taylor, R., Dharsee, M., Ho, Y., Heilbut, A., Moore, L., Zhang, S., Ornatsky, O., Bukhman, Y.V., Ethier, M., Sheng, Y., et al. 2007. Large-scale mapping of human proteinprotein interactions by mass spectrometry. Mol. Syst. Biol. 3: 89.

CHROMOSOMAL LOCATION

Genetic locus: ITFG2 (human) mapping to 12p13.33; Itfg2 (mouse) mapping to 6 F3.

SOURCE

ITFG2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of ITFG2 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

ITFG2 (H-300) is recommended for detection of ITFG2 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ITFG2 (H-300) is also recommended for detection of ITFG2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ITFG2 siRNA (h): sc-95815, ITFG2 siRNA (m): sc-146307, ITFG2 shRNA Plasmid (h): sc-95815-SH, ITFG2 shRNA Plasmid (m): sc-146307-SH, ITFG2 shRNA (h) Lentiviral Particles: sc-95815-V and ITFG2 shRNA (m) Lentiviral Particles: sc-146307-V.

Molecular Weight of ITFG2: 49 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209 or Jurkat whole cell lysate: sc-2204.

DATA



ITFG2 (H-300): sc-134686. Western blot analysis of ITFG2 expression in Jurkat whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **ITFG2 (F-11): sc-271420**, our highly recommended monoclonal alternative to ITFG2 (H-300).