SANTA CRUZ BIOTECHNOLOGY, INC.

paxillin (H-114): sc-5574



BACKGROUND

Paxillin is a focal adhesion phosphoprotein that is localized to the cytoskeleton. Phosphorylation of paxillin has been shown to occur in response to PDGF treatment, v-src transformation or cross-linking of integrins. FAK (focal adhesion kinase) and PYK2 have been shown to phosphorylate paxillin. FAK phosphorylates paxillin specifically on Tyr-118 *in vitro*. However, FAK phosphorylation does not seem to be required for the recruitment of paxillin to cell adhesion sites. Paxillin may play a role in signal transduction, regulation of cell morphology and the recruitment of structural and signaling molecules to focal adhesions. It has been shown that the amount of paxillin is reduced in mitotic cells by proteolytic downregulation and that paxillin is alternatively phosphorylated on serine rather than on tyrosine and serine during mitosis.

CHROMOSOMAL LOCATION

Genetic locus: PXN (human) mapping to 12q24.23; Pxn (mouse) mapping to 5 F.

SOURCE

paxillin (H-114) is a rabbit polyclonal antibody raised against amino acids 155-268 mapping within an internal region of paxillin of human origin.

PRODUCT

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

APPLICATIONS

paxillin (H-114) is recommended for detection of α , β and γ isoforms of paxillin 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).

paxillin (H-114) is also recommended for detection of α , β and γ isoforms of paxillin in additional species, including equine, canine and bovine.

Suitable for use as control antibody for paxillin siRNA (h): sc-29439, paxillin siRNA (m): sc-36197, paxillin shRNA Plasmid (h): sc-29439-SH, paxillin shRNA Plasmid (m): sc-36197-SH, paxillin shRNA (h) Lentiviral Particles: sc-29439-V and paxillin shRNA (m) Lentiviral Particles: sc-36197-V.

Molecular Weight of paxillin: 68 kDa.

Positive Controls: paxillin (h): 293 Lysate: sc-112281, CCD-1064Sk cell lysate: sc-2263 or HISM cell lysate: sc-2229.

RESEARCH USE

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

PROTOCOLS

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

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA





paxillin (H-114): sc-5574. Western blot analysis of paxillin expression in non-transfected 2931: sc-117752 (**A**), human paxillin transfected 2937: sc-112281 (**B**) and HISM (**C**) whole cell lysates. paxillin (H-114): sc-5574. Western blot analysis of paxillin expression in CCD-1064Sk $({\rm A})$ and HISM $({\rm B})$ whole cell lysates.

SELECT PRODUCT CITATIONS

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- Romanov, V.S., et al. 2011. p21Waf1 is required for complete oncogenic transformation of mouse embryo fibroblasts by E1Aad5 and c-Ha-ras oncogenes. Biochimie 93: 1408-1414.
- 4. Hoffecker, I.T., et al. 2011. Assessing the spatial resolution of cellular rigidity sensing using a micropatterned hydrogel-photoresist composite. Lab Chip 11: 3538-3544.
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- 7. Heering, J., et al. 2012. Loss of the ceramide transfer protein augments EGF receptor signaling in breast cancer. Cancer Res. 72: 2855-2866.
- Huck, B., et al. 2012. GIT1 phosphorylation on serine 46 by PKD3 regulates paxillin trafficking and cellular protrusive activity. J. Biol. Chem. 287: 34604-34613.



Try paxillin (B-2): sc-365379 or paxillin (C-1): sc-373880, our highly recommended monoclonal alternatives to paxillin (H-114). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see paxillin (B-2): sc-365379.