γ-parvin (h): 293T Lysate: sc-114463



The Power to Question

BACKGROUND

The parvin family, including α -parvin, β -parvin and γ -parvin, link integrins and associated proteins with intracellular pathways, which regulate Actin cytoskeletal dynamics and cell survival. All three family members localize to focal adhesions and function in cell adhesion, spreading, motility and survival through interactions with partners, such as integrin-linked kinase (ILK), paxillin, α -actinin and testicular kinase 1. α -parvin is widely expressed, with highest levels detected in the skeletal muscle, heart, liver and kidney. A complex made up of α -parvin, ILK and the LIM protein, PINCH-1, is critical for cell survival in a variety of cells, including certain cancer cells, kidney podocytes and cardiac myocytes. β -parvin links initial integrin signals to rapid Actin reorganization, thereby playing a critical role in fibroblast migration. The ILK- γ -parvin complex is essential for the establishment of cell polarity required for leukocyte migration.

REFERENCES

- 1. Olski, T.M., et al. 2001. Parvin, a 42 kDa focal adhesion protein, related to the α -actinin superfamily. J. Cell Sci. 114: 525-538.
- 2. Korenbaum, E., et al. 2001. Genomic organization and expression profile of the parvin family of focal adhesion proteins in mice and humans. Gene 279: 69-79.
- 3. Aboulaich, N., et al. 2004. Vectorial proteomics reveal targeting, phosphorylation and specific fragmentation of polymerase I and transcript release factor (PTRF) at the surface of caveolae in human adipocytes. Biochem. J. 383: 237-248.
- 4. Yamaji, S., et al. 2004. Affixin interacts with α -actinin and mediates integrin signaling for reorganization of F-Actin induced by initial cell-substrate interaction. J. Cell Biol. 165: 539-551.
- 5. Zhang, Y., et al. 2004. Distinct roles of two structurally closely related focal adhesion proteins, α -parvins and β -parvins, in regulation of cell morphology and survival. J. Biol. Chem. 279: 41695-41705.
- 6. Filipenko, N.R., et al. 2005. Integrin-linked kinase activity regulates Rac-and Cdc42-mediated actin cytoskeleton reorganization via α PIX. Oncogene 24: 5837-5849.
- 7. Matsuda, C., et al. 2005. Dysferlin interacts with affixin (β -parvin) at the sarcolemma. J. Neuropathol. Exp. Neurol. 64: 334-340.
- 8. Chen, H., et al. 2005. Role of the integrin-linked kinase/Pinch- $1/\alpha$ -parvin complex in cardiac myocyte hypertrophy. Lab. Invest. 85: 1342-1356.
- 9. Yang, Y., et al. 2005. Formation and phosphorylation of the Pinch-1-integrin-linked kinase- α -parvin complex are important for regulation of renal glomerular podocyte adhesion, architecture, and survival. J. Am. Soc. Nephrol. 16: 1966-1976.

CHROMOSOMAL LOCATION

Genetic locus: PARVG (human) mapping to 22q13.31.

RESEARCH USE

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

PRODUCT

 γ -parvin (h): 293T Lysate represents a lysate of human γ -parvin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

 $\gamma\text{-parvin}$ (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive $\gamma\text{-parvin}$ antibodies. Recommended use: 10-20 μI per lane.

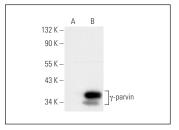
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

 γ -parvin (G-8): sc-393593 is recommended as a positive control antibody for Western Blot analysis of enhanced human γ -parvin expression in γ -parvin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgGκ BP-HRP: sc-516102 or m-lgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



γ-parvin (G-8): sc-393593. Western blot analysis of γ-parvin expression in non-transfected: sc-117752 (A) and human γ-parvin transfected: sc-114463 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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