γ-parvin (G-8): sc-393593



The Power to Question

BACKGROUND

The parvin family, including $\alpha\text{-parvin}$, $\beta\text{-parvin}$ and $\gamma\text{-parvin}$, 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, $\alpha\text{-actinin}$ and testicular kinase 1. $\alpha\text{-parvin}$ is widely expressed, with highest levels detected in the skeletal muscle, heart, liver and kidney. A complex made up of $\alpha\text{-parvin}$, 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. $\beta\text{-parvin}$ links initial integrin signals to rapid Actin reorganization, thereby playing a critical role in fibroblast migration. The ILK- $\gamma\text{-parvin}$ 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: PARVG (human) mapping to 22q13.31; Parvg (mouse) mapping to 15 E2.

SOURCE

 $\gamma\text{-parvin}$ (G-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 51-70 near the N-terminus of $\gamma\text{-parvin}$ of human origin.

PRODUCT

Each vial contains 200 $\mu g \ lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

γ-parvin (G-8) is available conjugated to agarose (sc-393593 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393593 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393593 PE), fluorescein (sc-393593 FITC), Alexa Fluor® 488 (sc-393593 AF488), Alexa Fluor® 546 (sc-393593 AF546), Alexa Fluor® 594 (sc-393593 AF594) or Alexa Fluor® 647 (sc-393593 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393593 AF680) or Alexa Fluor® 790 (sc-393593 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393593 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

 $\gamma\text{-parvin}$ (G-8) is recommended for detection of $\gamma\text{-parvin}$ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for γ -parvin siRNA (h): sc-61302, γ -parvin siRNA (m): sc-61304, γ -parvin shRNA Plasmid (h): sc-61302-SH, γ -parvin shRNA Plasmid (m): sc-61304-SH, γ -parvin shRNA (h) Lentiviral Particles: sc-61302-V and γ -parvin shRNA (m) Lentiviral Particles: sc-61304-V.

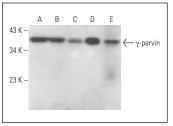
Molecular Weight of γ-parvin: 37 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, F9 cell lysate: sc-2245 or HL-60 whole cell lysate: sc-2209.

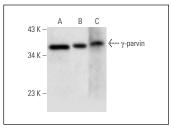
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA







 $\gamma\text{-parvin}$ (G-8): sc-393593. Western blot analysis of $\gamma\text{-parvin}$ expression in I-11.15 (**A**), F9 (**B**) and rat spleen tissue extract (**C**).

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.

PROTOCOLS

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