

SHARPIN (Y-14): sc-98129

BACKGROUND

SHARPIN (Shank-associated RH domain interactor), also known as SIPL1, is a 387 amino acid protein that localizes to the cytoplasm and contains one RanBP2-type zinc finger. Expressed at high levels in placenta and skeletal muscle and present at lower levels in colon, brain, heart, liver, kidney, lung, thymus and small intestine, SHARPIN interacts with Shank 1 and is thought to play a role in the control of inflammatory responses and in the overall development of the immune system. SHARPIN exists as three alternatively spliced isoforms and shares 73% sequence identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding SHARPIN maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

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- Lim, S., Sala, C., Yoon, J., Park, S., Kuroda, S., Sheng, M. and Kim, E. 2001. SHARPIN, a novel postsynaptic density protein that directly interacts with the Shank family of proteins. *Mol. Cell. Neurosci.* 17: 385-397.
- Daigo, Y., Takayama, I., Ward, S.M., Sanders, K.M. and Fujino, M.A. 2003. Novel human and mouse genes encoding a Shank-interacting protein and its upregulation in gastric fundus of W/WV mouse. *J. Gastroenterol. Hepatol.* 18: 712-718.
- Seymour, R.E., Hasham, M.G., Cox, G.A., Shultz, L.D., Hogenesch, H., Roopenian, D.C. and Sundberg, J.P. 2007. Spontaneous mutations in the mouse Sharpin gene result in multiorgan inflammation, immune system dysregulation and dermatitis. *Genes Immun.* 8: 416-421.

CHROMOSOMAL LOCATION

Genetic locus: SHARPIN (human) mapping to 8q24.3; Sharpin (mouse) mapping to 15 D3.

SOURCE

SHARPIN (Y-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SHARPIN of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98129 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SHARPIN (Y-14) is recommended for detection of SHARPIN 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).

SHARPIN (Y-14) is also recommended for detection of SHARPIN in additional species, including equine and bovine.

Suitable for use as control antibody for SHARPIN siRNA (h): sc-77833, SHARPIN siRNA (m): sc-153444, SHARPIN shRNA Plasmid (h): sc-77833-SH, SHARPIN shRNA Plasmid (m): sc-153444-SH, SHARPIN shRNA (h) Lentiviral Particles: sc-77833-V and SHARPIN shRNA (m) Lentiviral Particles: sc-153444-V.

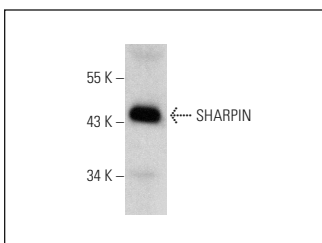
Molecular Weight of SHARPIN: 45 kDa.

Positive Controls: mouse epididymus tissue extract.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SHARPIN (Y-14): sc-98129. Western blot analysis of SHARPIN expression in mouse epididymus tissue extract.

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.