SANTA CRUZ BIOTECHNOLOGY, INC.

SHARPIN (G-18): sc-98127

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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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2. 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.
3. 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.
4. 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.
5. Beresewicz, M. 2007. Scaffold proteins (MAGUK, Shank and Homer) in postsynaptic density in the central nervous system. Postepy Biochem. 53: 188-197.
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CHROMOSOMAL LOCATION

Genetic locus: SHARPIN (human) mapping to 8q24.3.

SOURCE

SHARPIN (G-18) 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-98127 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SHARPIN (G-18) is recommended for detection of SHARPIN of 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), immunohistochemistry (including paraffin-embedded sections) (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 (G-18) 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 shRNA Plasmid (h): sc-77833-SH and SHARPIN shRNA (h) Lentiviral Particles: sc-77833-V.

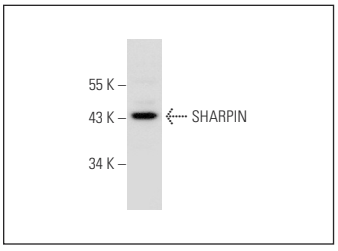
Molecular Weight of SHARPIN: 45 kDa.

Positive Controls: HEK293T whole cell lysate: sc-45137.

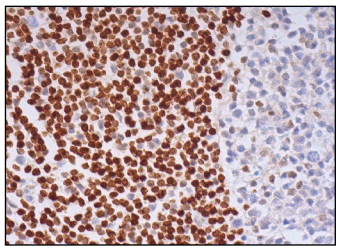
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



SHARPIN (G-18): sc-98127. Western blot analysis of SHARPIN expression in HEK293T whole cell lysate.



SHARPIN (G-18): sc-98127. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in non-germinal centers.

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.