SANTA CRUZ BIOTECHNOLOGY, INC.

LSm6 (C-20): sc-74960

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The Power to Question

BACKGROUND

Sm and Sm-like (LSm) proteins form donut-shaped, ubiquitously expressed heptameric complexes that are involved in various steps of RNA metabolism, including RNA-protein interactions and structural changes that are required during ribosomal subunit assembly. LSm6 is an 80 amino acid protein that localizes to both the nucleus and the cytoplasm and belongs to the LSm subfamily of snRNP Sm proteins. Functioning as a component of the heptameric LSm1-LSm7 complex, LSm6 is involved in mRNA degradation, specifically by activating the decapping step in the 5'-to-3' mRNA decay pathway. Additionally, LSm6 plays a role in facilitating the association of RNA processing factors with their substrates and may also be involved in the processing of tRNAs.

REFERENCES

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3. Friesen, W.J. and Dreyfuss, G. 2000. Specific sequences of the Sm and Sm-like (Lsm) proteins mediate their interaction with the spinal muscular atrophy disease gene product (SMN). J. Biol. Chem. 275: 26370-26375.
4. Ingelfinger, D., Arndt-Jovin, D.J., Lührmann, R. and Achsel, T. 2002. The human LSm1-7 proteins colocalize with the mRNA-degrading enzymes Dcp1/2 and Xrnl in distinct cytoplasmic foci. RNA 8: 1489-1501.
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6. Kittler, R., Putz, G., Pelletier, L., Poser, I., Heninger, A.K., Drechsel, D., Fischer, S., Konstantinova, I., Habermann, B., Grabner, H., Yaspo, M.L., Himmelbauer, H., Korn, B., Neugebauer, K., Pisabarro, M.T. and Buchholz, F. 2004. An endoribonuclease-prepared siRNA screen in human cells identifies genes essential for cell division. Nature 432: 1036-1040.
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CHROMOSOMAL LOCATION

Genetic locus: LSM6 (human) mapping to 4q31.22; Lsm6 (mouse) mapping to 8 C1.

STORAGE

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

PROTOCOLS

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

SOURCE

LSm6 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LSm6 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-74960 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-74960 X, 200 µg/0.1 ml.

APPLICATIONS

LSm6 (C-20) is recommended for detection of LSm6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

LSm6 (C-20) is also recommended for detection of LSm6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for LSm6 siRNA (h): sc-75711, LSm6 siRNA (m): sc-75712, LSm6 shRNA Plasmid (h): sc-75711-SH, LSm6 shRNA Plasmid (m): sc-75712-SH, LSm6 shRNA (h) Lentiviral Particles: sc-75711-V and LSm6 shRNA (m) Lentiviral Particles: sc-75712-V.

LSm6 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LSm6: 9 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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