SANTA CRUZ BIOTECHNOLOGY, INC.

LSm8 (FL-96): sc-98327

BACKGROUND

Sm and Sm-like (LSm) proteins form donut-shaped heptameric complexes that are involved in various steps of RNA metabolism. LSm proteins are ubiquitously expressed and facilitate RNA-protein interactions and structural changes that are required during ribosomal subunit assembly. LSm8, also known as YJR022W, is a member of the snRNP Sm proteins family. It is a component of the LSm2-8 complex which plays a role in the processing of pre-snoRNAs, pre-tRNAs and pre-rRNAs, as well as the turnover of pre-mRNAs. The LSm2-8 complex is also essential for the nuclear localization of the U6 snRNA. LSm8 localizes to the nucleus and specifically binds the U6 snRNA 3'-terminal U-tract.

REFERENCES

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3. Tomasevic, N. and Peculis, B.A. 2002. *Xenopus* LSm proteins bind U8 snoRNA via an internal evolutionarily conserved octamer sequence. Mol. Cell. Biol. 22: 4101-4112.
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5. Ingelfinger, D., Arndt-Jovin, D.J., Lührmann, R. and Achsel, T. 2003. The human LSm1-7 proteins colocalize with the mRNA-degrading enzymes Dcp1/2 and Xrnl in distinct cytoplasmic foci. RNA 8: 1489-1501.
6. Kufel, J., Allmang, C., Petfalski, E., Beggs, J. and Tollervey, D. 2003. LSm proteins are required for normal processing and stability of ribosomal RNAs. J. Biol. Chem. 278: 2147-2156.
7. Kufel, J., Bousquet-Antonelli, C., Beggs, J.D. and Tollervey, D. 2004. Nuclear pre-mRNA decapping and 5' degradation in yeast require the LSm2-8p complex. Mol. Cell. Biol. 24: 9646-9657.

CHROMOSOMAL LOCATION

Genetic locus: LSM8 (human) mapping to 7q31.31; Lsm8 (mouse) mapping to 6 A2.

SOURCE

LSm8 (FL-96) is a rabbit polyclonal antibody raised against amino acids 1-96 representing full length LSm8 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98327 X, 200 µg/0.1 ml.

APPLICATIONS

LSm8 (FL-96) is recommended for detection of LSm8 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).

LSm8 (FL-96) is also recommended for detection of LSm8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for LSm8 siRNA (h): sc-75715, LSm8 siRNA (m): sc-75716, LSm8 shRNA Plasmid (h): sc-75715-SH, LSm8 shRNA Plasmid (m): sc-75716-SH, LSm8 shRNA (h) Lentiviral Particles: sc-75715-V and LSm8 shRNA (m) Lentiviral Particles: sc-75716-V.

LSm8 (FL-96) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

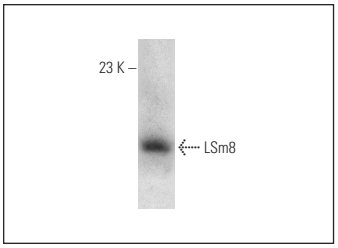
Molecular Weight of LSm8: 10 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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



LSm8 (FL-96): sc-98327. Western blot analysis of LSm8 expression in HeLa whole cell lysate.

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.