

LSm8 (F-8): sc-390542

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.

REFERENCE

1. Pannone, B.K., et al. 1998. A role for the yeast La protein in U6 snRNP assembly: evidence that the La protein is a molecular chaperone for RNA polymerase III transcripts. *EMBO J.* 17: 7442-7453.
2. Pannone, B.K., et al. 2001. Multiple functional interactions between components of the LSm2-LSm8 complex, U6 snRNA, and the yeast La protein. *Genetics* 158: 187-196.
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.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607288. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Ingelfinger, D., et al. 2003. The human LSm1-7 proteins colocalize with the mRNA-degrading enzymes Dcp1/2 and Xrn1 in distinct cytoplasmic foci. *RNA* 8: 1489-1501.

CHROMOSOMAL LOCATION

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

SOURCE

LSm8 (F-8) is a mouse monoclonal antibody raised against amino acids 1-96 representing full length LSm8 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-390542 X, 200 µg/0.1 ml.

LSm8 (F-8) is available conjugated to agarose (sc-390542 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390542 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390542 PE), fluorescein (sc-390542 FITC), Alexa Fluor[®] 488 (sc-390542 AF488), Alexa Fluor[®] 546 (sc-390542 AF546), Alexa Fluor[®] 594 (sc-390542 AF594) or Alexa Fluor[®] 647 (sc-390542 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390542 AF680) or Alexa Fluor[®] 790 (sc-390542 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

LSm8 (F-8) is recommended for detection of LSm8 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), 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).

LSm8 (F-8) is also recommended for detection of LSm8 in additional species, including equine, canine, bovine and porcine.

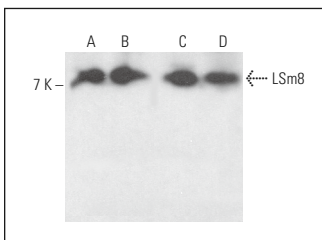
Suitable for use as control antibody for LSm8 siRNA (h): sc-75715, LSm8 siRNA (m): sc-75716, LSm8 shRNA Plasmid (h): sc-75715-SH, LSm8 shRNA Plasmid (m): sc-75716-SH, LSm8 shRNA (h) Lentiviral Particles: sc-75715-V and LSm8 shRNA (m) Lentiviral Particles: sc-75716-V.

LSm8 (F-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

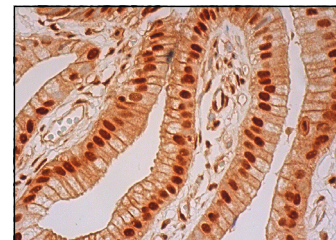
Molecular Weight of LSm8: 10 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or NIH/3T3 whole cell lysate: sc-2210.

DATA



LSm8 (F-8): sc-390542. Western blot analysis of LSm8 expression in HeLa (A), Jurkat (B) and NIH/3T3 (C) whole cell lysates and rat colon tissue extract (D).



LSm8 (F-8): sc-390542. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Stölzel, F., et al. 2023. Biallelic TET2 mutations confer sensitivity to 5'-azacitidine in acute myeloid leukemia. *JCI Insight* 8: e150368.

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.

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