LSm6 (H-40): sc-98326



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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- 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.

CHROMOSOMAL LOCATION

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

SOURCE

LSm6 (H-40) is a rabbit polyclonal antibody raised against amino acids 1-40 mapping at the N-terminus of LSm6 of human origin.

PRODUCT

Each vial contains 200 μg lgG 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-98326 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

LSm6 (H-40) 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), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

LSm6 (H-40) 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 (H-40) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

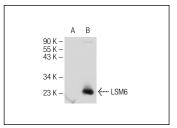
Molecular Weight of LSm6: 9 kDa.

Positive Controls: LSM6 (h): 293 Lysate: sc-111906.

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



LSm6 (H-40): sc-98326. Western blot analysis of LSM6 expression in non-transfected: sc-110760 (**A**) and human LSM6 transfected: sc-111906 (**B**) 293 whole cell lysates

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.