

LSm3 (L-18): sc-74953

BACKGROUND

Sm and Sm-like (LSm) proteins form donut shaped heptameric complexes that are involved in various steps of RNA metabolism. Lsm proteins facilitate RNA protein interactions and structural changes that are required during ribosomal subunit assembly. LSm3 (U6 snRNA-associated Sm-like protein LSm3) is a 102 amino acid nuclear protein that specifically binds the 3'-terminal U-tract of U6 snRNA. The homomeric LSm3 octamer recruits LSm6, LSm2 and LSm5 to facilitate the formation of U4/U6 RNA duplexes. The gene encoding LSm3 maps to human chromosome 3, which is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LSM3 (human) mapping to 3p25.1; Lsm3 (mouse) mapping to 6 D1.

SOURCE

LSm3 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LSm3 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-74953 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-74953 X, 200 µg/0.1 ml.

APPLICATIONS

LSm3 (L-18) is recommended for detection of LSm3 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).

LSm3 (L-18) is also recommended for detection of LSm3 in additional species, including canine.

Suitable for use as control antibody for LSm3 siRNA (h): sc-75707, LSm3 siRNA (m): sc-75708, LSm3 shRNA Plasmid (h): sc-75707-SH, LSm3 shRNA Plasmid (m): sc-75708-SH, LSm3 shRNA (h) Lentiviral Particles: sc-75707-V and LSm3 shRNA (m) Lentiviral Particles: sc-75708-V.

LSm3 (L-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LSm3: 12 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.

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 or our catalog for detailed protocols and support products.