

LSm1 (K-14): sc-54089

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. LSm1, also designated U6 snRNA-associated Sm-like protein or small nuclear ribonuclear CaSm, binds specifically to the 3'-terminal U-tract of U6 snRNA. Human LSm1 localizes to the cytoplasm in small, discrete foci. These foci are also the localization site for the mRNA decapping enzyme Dcp1/2 and the exonuclease Xrn1. LSm1 is naturally over-expressed in pancreatic cancer as well as in certain breast cancer cell lines. The downregulation of LSm1 is involved in the progression of prostate cancer.

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CHROMOSOMAL LOCATION

Genetic locus: LSM1 (human) mapping to 8p11.23; Lsm1 (mouse) mapping to 8 A3.

RESEARCH USE

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

SOURCE

LSm1 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LSm1 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-54089 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LSm1 (K-14) is recommended for detection of LSm1 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).

LSm1 (K-14) is also recommended for detection of LSm1 in additional species, including bovine.

Suitable for use as control antibody for LSm1 siRNA (h): sc-72335, LSm1 siRNA (m): sc-72336, LSm1 shRNA Plasmid (h): sc-72335-SH, LSm1 shRNA Plasmid (m): sc-72336-SH, LSm1 shRNA (h) Lentiviral Particles: sc-72335-V and LSm1 shRNA (m) Lentiviral Particles: sc-72336-V.

Molecular Weight of LSm1: 15 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.

PROTOCOLS

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