LSm4 (N-19): sc-54842



The Power to Question

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. LSm4, also called U6 snRNA-associated Sm-like protein or glycine-rich protein (GRP), binds specifically to the 3'-terminal U-tract of U6 snRNA. Human LSm4 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 Xm1.

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CHROMOSOMAL LOCATION

Genetic locus: LSM4 (human) mapping to 19p13.11; Lsm4 (mouse) mapping to 8 B3.3.

SOURCE

LSm4 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of LSm4 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-54842 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LSm4 (N-19) is recommended for detection of LSm4 of mouse 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).

LSm4 (N-19) is also recommended for detection of LSm4 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for LSm4 siRNA (h): sc-62567, LSm4 siRNA (m): sc-62568, LSm4 shRNA Plasmid (h): sc-62567-SH, LSm4 shRNA Plasmid (m): sc-62568-SH, LSm4 shRNA (h) Lentiviral Particles: sc-62567-V and LSm4 shRNA (m) Lentiviral Particles: sc-62568-V.

Molecular Weight of LSm4: 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.

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.

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