

LSm14B (S-20): sc-85762

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. LSm14B, also known as C20orf40, FAM61B or LSM13, is a 385 amino acid protein that exists as multiple alternatively spliced isoforms and may play a role in RNA-related events. The gene encoding LSm14B maps to human chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome.

REFERENCES

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3. Barbee, S.A. and Evans, T.C. 2006. The Sm proteins regulate germ cell specification during early *C. elegans* embryogenesis. *Dev. Biol.* 291: 132-143.
4. Ville, D., et al. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
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CHROMOSOMAL LOCATION

Genetic locus: LSM14B (human) mapping to 20q13.33; Lsm14b (mouse) mapping to 2 H4.

SOURCE

LSm14B (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LSm14B 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-85762 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LSm14B (S-20) is recommended for detection of LSm14B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LSm14B siRNA (h): sc-75704, LSm14B siRNA (m): sc-149133, LSm14B shRNA Plasmid (h): sc-75704-SH, LSm14B shRNA Plasmid (m): sc-149133-SH, LSm14B shRNA (h) Lentiviral Particles: sc-75704-V and LSm14B shRNA (m) Lentiviral Particles: sc-149133-V.

Molecular Weight (predicted) of LSm14B: 42 kDa.

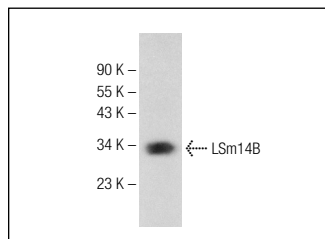
Molecular Weight (observed) of LSm14B: 31-33 kDa.

Positive Controls: F9 cell lysate: sc-2245, mouse testis extract: sc-2405 or rat testis extract: sc-2400.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



LSm14B (S-20): sc-85762. Western blot analysis of LSm14B expression in F9 whole cell lysate.

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.