

LSmD1 (C-14): sc-136742

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. LSmD1 (LSM domain-containing protein 1), also known as MAK31 and PFAAP2 (phosphonoformate immuno-associated protein 2), is a 125 amino acid protein that is a component of the N-terminal acetyltransferase C (NatC) complex. Composed of MAK10, NAT-12 and LSmD1, the NatC complex catalyzes the acetylation of amino-terminal methionine residues. siRNA knockdown of NatC complex subunits leads to p53-dependent cell death and reduced growth of cell lines. There are two isoforms of LSmD1 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LSM1 (human) mapping to 17p13.1; Lsm1 (mouse) mapping to 11 B3.

SOURCE

LSmD1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LSmD1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136742 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LSmD1 (C-14) is recommended for detection of LSmD1 isoforms 1 and 2 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).

LSmD1 (C-14) is also recommended for detection of LSmD1 isoforms 1 and 2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for LSmD1 siRNA (h): sc-94209, LSmD1 siRNA (m): sc-149134, LSmD1 shRNA Plasmid (h): sc-94209-SH, LSmD1 shRNA Plasmid (m): sc-149134-SH, LSmD1 shRNA (h) Lentiviral Particles: sc-94209-V and LSmD1 shRNA (m) Lentiviral Particles: sc-149134-V.

Molecular Weight of LSmD1 isoforms 1/2: 14/19 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.

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.