

LSG1 (D-18): sc-103027

BACKGROUND

LSG1 (large subunit GTPase 1) is a 658 amino acid GTPase that shuttles between nuclear Cajal bodies and the endoplasmic reticulum. LSG1 is required for CRM1-mediated nuclear export of the 60S ribosomal subunit. The yeast homolog of LSG1 is involved in ribosome biogenesis. Knockdown of the gene encoding LSG1 results in a rapid decrease in cell numbers and an increase in apoptotic cells, therefore it has been determined that LSG1 is essential for cell viability. LSG1 contains an N-terminal coiled-coil domain, a central MMR/HSG1 GTPase domain and a nuclear localization signal. The LSG1 gene maps to chromosome 3, which is made up of about 214 million bases and encodes over 1,100 genes. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LSG1 (human) mapping to 3q29.

STORAGE

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

SOURCE

LSG1 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LSG1 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-103027 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LSG1 (D-18) is recommended for detection of LSG1 of 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).

Suitable for use as control antibody for LSG1 siRNA (h): sc-78059, LSG1 shRNA Plasmid (h): sc-78059-SH and LSG1 shRNA (h) Lentiviral Particles: sc-78059-V.

Molecular Weight of LSG1: 75 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.