

LRSAM1 (C-17): sc-139531

BACKGROUND

Ubiquitin is an abundant, highly conserved protein found in all eukaryotic cells either free or covalently attached to cellular proteins. Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). LRSAM1 (leucine-rich repeat and sterile α motif-containing protein 1), also known as Tsg101-associated ligase, is a 723 amino acid E3 ubiquitin-protein ligase that mediates the monoubiquitination of tsg 101, a regulator of vesicular trafficking. This leads to inactivation of the sorting of endocytic and exocytic cargos, such as EGF receptors and HIV-1 viral proteins. Mutations within the LRSAM1 gene have been identified in patients with Charcot-Marie-Tooth disease. There are three isoforms of LRSAM1 that are produced as a result of alternative splicing events.

REFERENCES

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2. Carlton, J.G. and Martin-Serrano, J. 2007. Parallels between cytokinesis and retroviral budding: a role for the ESCRT machinery. *Science* 316: 1908-1912.
3. McDonald, B. and Martin-Serrano, J. 2008. Regulation of Tsg101 expression by the steadiness box: a role of Tsg101-associated ligase. *Mol. Biol. Cell* 19: 754-763.
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CHROMOSOMAL LOCATION

Genetic locus: LRSAM1 (human) mapping to 9q33.3; Lrsam1 (mouse) mapping to 2 B.

SOURCE

LRSAM1 (C-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of LRSAM1 of human origin.

PRODUCT

Each vial contains 100 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-139531 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

LRSAM1 (C-17) is recommended for detection of LRSAM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein 1 ml of cell lysate], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LRSAM1 (C-17) is also recommended for detection of LRSAM1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for LRSAM1 siRNA (h): sc-92826, LRSAM1 siRNA (m): sc-149124, LRSAM1 shRNA Plasmid (h): sc-92826-SH, LRSAM1 shRNA Plasmid (m): sc-149124-SH, LRSAM1 shRNA (h) Lentiviral Particles: sc-92826-V and LRSAM1 shRNA (m) Lentiviral Particles: sc-149124-V.

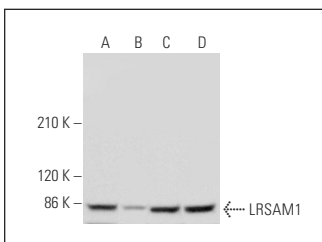
Molecular Weight of LRSAM1 isoform 1/2/3: 84/80/35 kDa.

Positive Controls: T-47D cell lysate: sc-2293, MCF7 whole cell lysate: sc-2206 or A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LRSAM1 (C-17): sc-139531. Western blot analysis of LRSAM1 expression in T-47D (A), HeLa (B), MCF7 (C) and A-431 (D) whole cell lysates.

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.