SANTA CRUZ BIOTECHNOLOGY, INC.

LYSMD1 (C-14): sc-240645

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma. The LYSMD1 gene product has been provisionally designated LYSMD1 pending further characterization.

REFERENCES

1. Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders—cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
4. Lans, H., et al. 2006. Cell biology: aging nucleus gets out of shape. Nature 440: 32-34.

CHROMOSOMAL LOCATION

Genetic locus: LYSMD1 (human) mapping to 1q21.2; Lysmd1 (mouse) mapping to 3 F2.1.

SOURCE

LYSMD1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LYSMD1 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-240645 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

LYSMD1 (C-14) is recommended for detection of LYSMD1 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); non cross-reactive with LYSMD2, LYSMD3 or LYSMD4.

Suitable for use as control antibody for LYSMD1 siRNA (h): sc-88211, LYSMD1 siRNA (m): sc-149189, LYSMD1 shRNA Plasmid (h): sc-88211-SH, LYSMD1 shRNA Plasmid (m): sc-149189-SH, LYSMD1 shRNA (h) Lentiviral Particles: sc-88211-V and LYSMD1 shRNA (m) Lentiviral Particles: sc-149189-V.

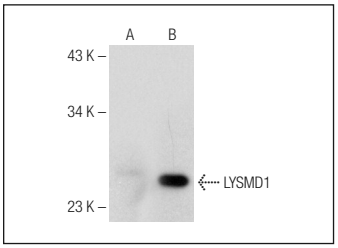
Molecular Weight of LYSMD1: 25 kDa.

Positive Controls: LYSMD1 (m): 293T Lysate: sc-121454 or LYSMD1 (h): 293T Lysate: sc-117177.

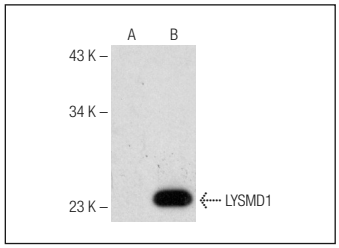
RECOMMENDED SECONDARY REAGENTS

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



LYSMD1 (C-14): sc-240645. Western blot analysis of LYSMD1 expression in non-transfected: sc-117752 (**A**) and mouse LYSMD1 transfected: sc-121454 (**B**) 293T whole cell lysates.



LYSMD1 (C-14): sc-240645. Western blot analysis of LYSMD1 expression in non-transfected: sc-117752 (**A**) and human LYSMD1 transfected: sc-117177 (**B**) 293T whole cell lysates.

RESEARCH USE

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