SANTA CRUZ BIOTECHNOLOGY, INC.

MSL-1 (h): 293T Lysate: sc-177568

BACKGROUND

MSL-1 (male-specific lethal 1 homolog *(Drosophila)),* also known as MSL1L1 (male-specific lethal 1-like 1), is a 614 amino acid nuclear protein that forms a multisubunit histone acetyltransferase complex with MOF, MSL-1, MSL-2 and MSL3L1. This complex is responsible for the majority of Histone H4 acetylation at lysine 16. Existing as three alternatively spliced isoforms, MSL-1 is a member of the MSL-1 family and is encoded by a gene that maps to human chromosome 17q21.1. Human chromosome 17 comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, and is liked to predisposition of cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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3. Piura, B., et al. 2001. Three primary malignancies related to BRCA mutation successively occurring in a BRCA1 185delAG mutation carrier. Eur. J. Obstet. Gynecol. Reprod. Biol. 97: 241-244.
4. Minamoto, T., et al. 2001. Distinct pattern of p53 phosphorylation in human tumors. Oncogene 20: 3341-3347.
5. Marín, I. 2003. Evolution of chromatin-remodeling complexes: comparative genomics reveals the ancient origin of "novel" compensasome genes. J. Mol. Evol. 56: 527-539.
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8. Sharma, G.G., et al. 2010. MOF and histone H4 acetylation at lysine 16 are critical for DNA damage response and double-strand break repair. Mol. Cell. Biol. 30: 3582-3595.
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CHROMOSOMAL LOCATION

Genetic locus: MSL1 (human) mapping to 17q21.1.

PRODUCT

MSL-1 (h): 293T Lysate represents a lysate of human MSL-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

MSL-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MSL-1 antibodies. Recommended use: 10-20 µl per lane.

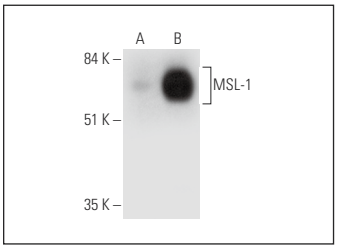
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MSL-1 (C-9): sc-514649 is recommended as a positive control antibody for Western Blot analysis of enhanced human MSL-1 expression in MSL-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



MSL-1 (C-9): sc-514649. Western blot analysis of MSL-1 expression in non-transfected: sc-117752 (**A**) and human MSL-1 transfected: sc-177568 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.