MASL1 (h): 293T Lysate: sc-369398



The Power to Question

BACKGROUND

The leucine-rich repeat (LRR) is a 20-30 amino acid motif that forms a hydrophobic α/β horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRRs contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. MASL1, also known as MFHAS1 (malignant fibrous histiocytoma amplified sequence 1) or LRRC65, is a 1,052 amino acid protein that contains 13 LRRs, which are thought to function as structural components for protein-protein interactions during the cell cycle. Ubiquitously expressed, MASL1 is upregulated in malignant fibrous histiocytomas, suggesting that, via its ability to mediate protein interactions during the cell cycle, MASL1 may play a role in tumorigenesis. The gene encoding MASL1 is subject to a chromosomal aberration that is thought to be a cause of B-cell lymphoma, further implying a role for MASL1 in tumor formation.

REFERENCES

- 1. Kobe, B. and Deisenhofer, J. 1994. The leucine-rich repeat: a versatile binding motif. Trends Biochem. Sci. 19: 415-421.
- 2. Kobe, B. and Deisenhofer, J. 1995. Proteins with leucine-rich repeats. Curr. Opin. Struct. Biol. 5: 409-416.
- 3. Sakabe, T., Shinomiya, T., Mori, T., Ariyama, Y., Fukuda, Y., Fujiwara, T., Nakamura, Y. and Inazawa, J. 1999. Identification of a novel gene, MASL1, within an amplicon at 8p23.1 detected in malignant fibrous histiocytomas by comparative genomic hybridization. Cancer Res. 59: 511-515.
- 4. Kobe, B. and Kajava, A.V. 2001. The leucine-rich repeat as a protein recognition motif. Curr. Opin. Struct. Biol. 11: 725-732.
- Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 605352. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Kedzierski, Ł., Montgomery, J., Curtis, J. and Handman, E. 2004. Leucinerich repeats in host-pathogen interactions. Arch. Immunol. Ther. Exp. 52: 104-112.
- Tagawa, H., Karnan, S., Kasugai, Y., Tuzuki, S., Suzuki, R., Hosokawa, Y. and Seto, M. 2004. MASL1, a candidate oncogene found in amplification at 8p23.1, is translocated in immunoblastic B-cell lymphoma cell line OCI-LY8. Oncogene 23: 2576-2581.
- Enkhbayar, P., Kamiya, M., Osaki, M., Matsumoto, T. and Matsushima, N. 2004. Structural principles of leucine-rich repeat (LRR) proteins. Proteins 54: 394-403.

CHROMOSOMAL LOCATION

Genetic locus: MFHAS1 (human) mapping to 8p23.1.

PRODUCT

MFHAS1 (h): 293T Lysate represents a lysate of human MFHAS1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

MFHAS1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MFHAS1 antibodies. Recommended use: 10-20 μ l per lane

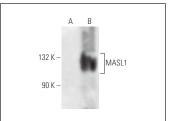
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

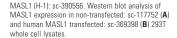
MASL1 (H-1): sc-390556 is recommended as a positive control antibody for Western Blot analysis of enhanced human MASL1 expression in MASL1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

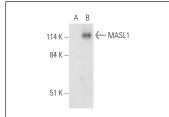
RECOMMENDED SUPPORT REAGENTS

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

DATA







MASL1 (C-8): sc-514968. Western blot analysis of MASL1 expression in non-transfected: sc-117752 (A) and human MASL1 transfected: sc-369398 (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.

PROTOCOLS

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