

MASL1 (C-8): sc-514968

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., et al. 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.
5. 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/>

CHROMOSOMAL LOCATION

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

SOURCE

MASL1 (C-8) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of MASL1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MASL1 (C-8) is available conjugated to agarose (sc-514968 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514968 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514968 PE), fluorescein (sc-514968 FITC), Alexa Fluor® 488 (sc-514968 AF488), Alexa Fluor® 546 (sc-514968 AF546), Alexa Fluor® 594 (sc-514968 AF594) or Alexa Fluor® 647 (sc-514968 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514968 AF680) or Alexa Fluor® 790 (sc-514968 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

MASL1 (C-8) is recommended for detection of MASL1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for MASL1 siRNA (h): sc-77672, MASL1 shRNA Plasmid (h): sc-77672-SH and MASL1 shRNA (h) Lentiviral Particles: sc-77672-V.

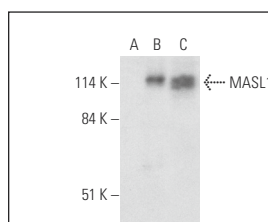
Molecular Weight of MASL1: 117 kDa.

Positive Controls: MASL1 (h): 293T Lysate: sc-369398, Hep G2 cell lysate: sc-2227 or Ramos cell lysate: sc-2216.

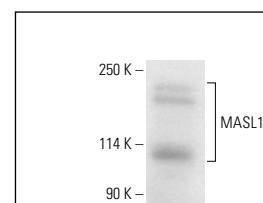
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MASL1 (C-8): sc-514968. Western blot analysis of MASL1 expression in non-transfected 293T: sc-117752 (A), human MASL1 transfected 293T: sc-369398 (B) and Ramos (C) whole cell lysates.



MASL1 (C-8): sc-514968. Western blot analysis of MASL1 expression in Hep G2 whole cell lysate. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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.