

LCMT1 (F-4): sc-365063

BACKGROUND

Protein phosphatase 2A (PP2A) is a serine/threonine (Ser/Thr) phosphatase that is thought to be involved in cell growth and proliferation events and may be associated with tumor progression. The activity of PP2A is regulated by a variety of mechanisms, one of which is the reversible methylation by select methyltransferases. LCMT1 (leucine carboxyl methyltransferase 1), also known as LCMT, PPMT1 or CGI-68, is a 334 amino acid member of the methyltransferase superfamily that is involved in the regulation of PP2A. Specifically, LCMT1 catalyzes the methylation of the carboxy group on the C-terminal leucine of the PP2A catalytic subunit (designated PP2A α). Via its ability to regulate PP2A function, LCMT1 may be critical for normal mitotic progression and overall cell survival. Two isoforms of LCMT1 are expressed due to alternative splicing events.

REFERENCES

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- Longin, S., Zwaenepoel, K., Martens, E., Louis, J.V., Rondelez, E., Goris, J. and Janssens, V. 2008. Spatial control of protein phosphatase 2A (de)methylation. *Exp. Cell Res.* 314: 68-81.

CHROMOSOMAL LOCATION

Genetic locus: LCMT1 (human) mapping to 16p12.1.

SOURCE

LCMT1 (F-4) is a mouse monoclonal antibody raised against amino acids 179-334 mapping at the C-terminus of LCMT1 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.

RESEARCH USE

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

APPLICATIONS

LCMT1 (F-4) is recommended for detection of LCMT1 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 LCMT1 siRNA (h): sc-93344, LCMT1 shRNA Plasmid (h): sc-93344-SH and LCMT1 shRNA (h) Lentiviral Particles: sc-93344-V.

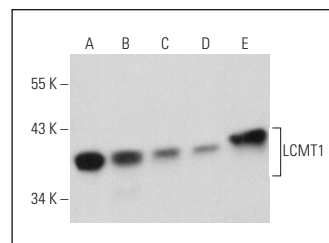
Molecular Weight of LCMT1: 38 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, U-87 MG cell lysate: sc-2411 or HEK293 whole cell lysate: sc-45136.

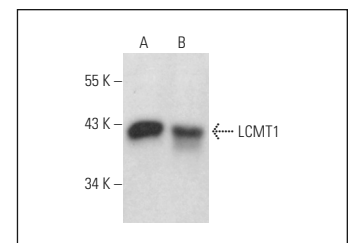
RECOMMENDED SUPPORT REAGENTS

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



LCMT1 (F-4): sc-365063. Western blot analysis of LCMT1 expression in Hep G2 (A), U-87 MG (B), HeLa (C), MCF7 (D) and HEK293 (E) whole cell lysates.



LCMT1 (F-4): sc-365063. Western blot analysis of LCMT1 expression in HeLa (A) and HL-60 (B) 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 for detailed protocols and support products.