**LCMT1 (4A4): sc-81609**

**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 carboxyl group of the C-terminal leucine of the PP2A catalytic subunit (designated PP2Aα). 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**


**CHROMOSOMAL LOCATION**

Genetic locus: Lcmt1 (mouse) mapping to 7 F3.

**SOURCE**

LCMT1 (4A4) is a mouse monoclonal antibody raised against His-tagged recombinant LCMT1 of mouse origin.

**PRODUCT**

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

LCMT1 (4A4) is available conjugated to agarose (sc-81609 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-81609 HRP), 200 µg/ml, for WB, HICIP and ELISA; to either phycoerythrin (sc-81609 PE), fluorescein (sc-81609 FITC), Alexa Fluor® 488 (sc-81609 AF488), Alexa Fluor® 546 (sc-81609 AF546), Alexa Fluor® 594 (sc-81609 AF594) or Alexa Fluor® 647 (sc-81609 AF647), 200 µg/ml, for WB (RGB), IF, HICIP and FCM; and to either Alexa Fluor® 680 (sc-81609 AF680) or Alexa Fluor® 790 (sc-81609 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**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.

**APPLICATIONS**

LCMT1 (4A4) is recommended for detection of LCMT1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for LCMT1 siRNA (m): sc-108010. LCMT1 siRNA (r): sc-156141, LCMT1 shRNA Plasmid (m): sc-108010-SH, LCMT1 shRNA Plasmid (r): sc-156141-SH, LCMT1 shRNA (m) Lentiviral Particles: sc-108010-V and LCMT1 siRNA (r) Lentiviral Particles: sc-156141-V.

Molecular Weight of LCMT1: 38 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, mouse brain extract: sc-2253 or C6 whole cell lysate: sc-364373.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: 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) Western Blotting: use m-IgGκ BP-HRP: 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).

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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