

PCMTD1 (D-25): sc-133895

BACKGROUND

PCMTD1 (protein-L-isoaspartate O-methyltransferase domain-containing protein 1) is a 357 amino acid cytoplasmic protein that is a member of the L-isoaspartyl/D-aspartyl protein methyltransferase family. Members of this family participate in the degradation and/or repair of damaged proteins by specifically recognizing isomerized Asp or Asn residues in peptides and proteins. PCMTD1 is related to PCMT1, which catalyzes the conversion of abnormal L-isoaspartyl and D-aspartyl residues to methyl esters that may then spontaneously hydrolyze to re-form normal aspartyl residues. In mice lacking PCMT1, damaged proteins accumulate in a variety of tissues and the phenotypic result is progressive epilepsy and death at an early age. There are two isoforms of PCMTD1 that are produced as a result of alternative splicing events.

REFERENCES

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4. DeVry, C.G. and Clarke, S. 1999. Polymorphic forms of the protein L-isoaspartate (D-aspartate) O-methyltransferase involved in the repair of age-damaged proteins. *J. Hum. Genet.* 44: 275-288.
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CHROMOSOMAL LOCATION

Genetic locus: PCMTD1 (human) mapping to 8q11.23; Pcmt1 (mouse) mapping to 1 A1.

SOURCE

PCMTD1 (D-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic PCMTD1 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

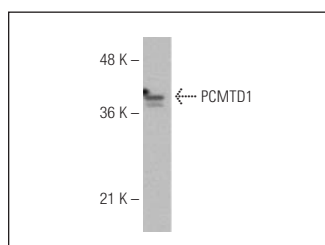
PCMTD1 (D-25) is recommended for detection of PCMTD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCMTD1 siRNA (h): sc-77510, PCMTD1 siRNA (m): sc-152113, PCMTD1 shRNA Plasmid (h): sc-77510-SH, PCMTD1 shRNA Plasmid (m): sc-152113-SH, PCMTD1 shRNA (h) Lentiviral Particles: sc-77510-V and PCMTD1 shRNA (m) Lentiviral Particles: sc-152113-V.

Molecular Weight of PCMTD1: 41 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

DATA



PCMTD1 (D-25): sc-133895. Western blot analysis of PCMTD1 expression in Hep G2 whole cell lysate.

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 or our catalog for detailed protocols and support products.