

p-CARM1 (Ser 228): sc-101649

BACKGROUND

CARM1 (co-activator-associated arginine methyltransferase 1), also known as protein arginine N-methyltransferase 4 (PRMT4), is a 585 amino acid nuclear and cytoplasmic protein belonging to the protein arginine N-methyltransferase family. As a protein arginine N-methyltransferase, CARM1 is capable of catalyzing the transfer of methyl groups from S-adenosylmethionine to the guanidino group nitrogen atoms of arginine residues in certain proteins involved in mRNA stability, DNA packaging and transcriptional regulation. The methyltransferase activity of CARM1 has been found to be negatively regulated through phosphorylation at a conserved serine residue. CARM1 acts as a positive regulator for multiple transcription factors and functions as a secondary co-activator through its association with p160 co-activators. CARM1 exists as two alternatively spliced isoforms, and is encoded by a gene that maps to human chromosome 19p13.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CARM1 (human) mapping to 19p13.2; Carm1 (mouse) mapping to 9 A3.

SOURCE

p-CARM1 (Ser 228) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 228 of CARM1 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

APPLICATIONS

p-CARM1 (Ser 228) is recommended for detection of Ser 228 phosphorylated CARM1 of human origin and correspondingly phosphorylated Ser 229 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 CARM1 siRNA (h): sc-44875, CARM1 siRNA (m): sc-37730, CARM1 shRNA Plasmid (h): sc-44875-SH, CARM1 shRNA Plasmid (m): sc-37730-SH, CARM1 shRNA (h) Lentiviral Particles: sc-44875-V and CARM1 shRNA (m) Lentiviral Particles: sc-37730-V.

Molecular Weight of CARM1 isoform 1: 64 kDa.

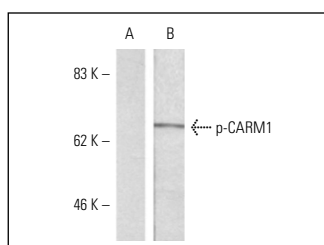
Molecular Weight of CARM1 isoform 2: 45 kDa.

Positive Controls: A-431 + EGF whole cell lysate: sc-2202.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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



Western blot analysis of phosphorylated CARM1 expression in EGF-treated A-431 whole cell lysate. Anti-bodies tested include p-CARM1 (Ser 228): sc-101649 preincubated with cognate phosphorylated peptide (A) and p-CARM1 (Ser 228): sc-101649 (B).

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.