

cyclin M1 (D-16): sc-68646

BACKGROUND

The ADCP (ancient conserved domain protein) family is evolutionarily conserved in diverse species and likely function in ion transport in mammalian cells. cyclin M1, also known as metal transporter CNNM1 and ACDP1 (ancient conserved domain-containing protein 1), is a 880 amino acid multi-pass membrane protein that shares weak sequence similarity with cyclin proteins, yet displays no cyclin-like function *in vivo*. With specific expression at high levels in brain and low levels in testis, cyclin M1 is localized to the plasma membrane and nucleus where it is likely a metal transporter. cyclin M1 contains two CBS domains, which appear to bind ligands with an adenosyl group such as AMP, ATP and S-AdoMet and may play a regulatory role in sensitizing proteins to adenosyl-carrying ligands. The gene encoding cyclin M1 maps to a region of human chromosome 10 which is frequently implicated in the pathology of urofacial (Ochoa) syndrome (UFS), a disease that is characterized by abnormal facial expression and congenital obstructive uropathy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CNNM1 (human) mapping to 10q24.2; Cnnm1 (mouse) mapping to 19 C3.

RESEARCH USE

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

SOURCE

cyclin M1 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of cyclin M1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68646 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cyclin M1 (D-16) is recommended for detection of cyclin M1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

cyclin M1 (D-16) is also recommended for detection of cyclin M1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for cyclin M1 siRNA (h): sc-77059, cyclin M1 siRNA (m): sc-77060, cyclin M1 shRNA Plasmid (h): sc-77059-SH, cyclin M1 shRNA Plasmid (m): sc-77060-SH, cyclin M1 shRNA (h) Lentiviral Particles: sc-77059-V and cyclin M1 shRNA (m) Lentiviral Particles: sc-77060-V.

Molecular Weight of cyclin M1: 97 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.