SANTA CRUZ BIOTECHNOLOGY, INC.

cyclin M3 (C-15): sc-68650



BACKGROUND

The ADCP (ancient conserved domain protein) family is evolutionarily conserved in diverse species and likely function in ion transport in mammalian cells. cyclin M3, also known as metal transporter CNNM3 and ACDP3, is a 707 amino acid multi-pass membrane protein that shares weak sequence similarity with cyclin proteins, yet displays no cyclin-like function *in vivo*. Though ubiquitously expressed, cyclin M3 is found at highest levels in kidney, brain, spleen and heart. cyclin M3 is localized to the nucleus where it is likely a metal transporter. cyclin M3 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. There are three isoforms of cyclin M3 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CNNM3 (human) mapping to 2q11.2; Cnnm3 (mouse) mapping to 1 B.

SOURCE

cyclin M3 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of cyclin M3 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Blocking peptide available for competition studies, sc-68650 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cyclin M3 (C-15) is recommended for detection of cyclin M3 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 M3 (C-15) is also recommended for detection of cyclin M3 in additional species, including canine and porcine.

Suitable for use as control antibody for cyclin M3 siRNA (h): sc-77063, cyclin M3 siRNA (m): sc-77064, cyclin M3 shRNA Plasmid (h): sc-77063-SH, cyclin M3 shRNA Plasmid (m): sc-77064-SH, cyclin M3 shRNA (h) Lentiviral Particles: sc-77063-V and cyclin M3 shRNA (m) Lentiviral Particles: sc-77064-V.

Molecular Weight of cyclin M3: 76 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) Immunofluo-rescence: 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.

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.