

cyclin M2 (S-19): sc-68286

BACKGROUND

cyclin M2, also known as CNNM2 or ACDP2 (ancient conserved domain-containing protein 2), is an 875 amino acid multi-pass membrane protein that contains two CBS domains and belongs to the ACDP family. Expressed in a variety of tissues with highest expression in placenta, brain and kidney, cyclin M2 functions as a divalent metal cation transporter that mediates the transport of several different metal cations, including Mg^{2+} , Co^{2+} and Fe^{2+} . cyclin M2 exists as multiple alternatively spliced isoforms and, contrary to its name, exhibits no cyclin-like function *in vivo*. The gene encoding cyclin M2 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CNNM2 (human) mapping to 10q24.32; Cnnm2 (mouse) mapping to 19 C3.

SOURCE

cyclin M2 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of cyclin M2 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 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-68286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cyclin M2 (S-19) is recommended for detection of cyclin M2 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 M2 (S-19) is also recommended for detection of cyclin M2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for cyclin M2 siRNA (h): sc-77061, cyclin M2 siRNA (m): sc-77062, cyclin M2 shRNA Plasmid (h): sc-77061-SH, cyclin M2 shRNA Plasmid (m): sc-77062-SH, cyclin M2 shRNA (h) Lentiviral Particles: sc-77061-V and cyclin M2 shRNA (m) Lentiviral Particles: sc-77062-V.

Molecular Weight of cyclin M2: 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.

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.