

Cdt2 (H-240): sc-98442

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. Cdt2, also known as DTL (denticleless homolog), CDW1, DCAF2, L2DTL or RAMP, is a 730 amino acid protein that localizes to both the cytoplasm and the nuclear membrane and contains 7 WD repeats. Expressed in testis, placenta, bone marrow, thymus and skeletal muscle, Cdt2 is required for DNA damage-induced Cdt1 proteolysis and is also thought to play an essential role in DNA replication and cell proliferation. Upon DNA damage, Cdt2 is subject to phosphorylation, probably by ATM or ATR. Two isoforms of Cdt2 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DTL (human) mapping to 1q32.3; Dtl (mouse) mapping to 1 H6.

SOURCE

Cdt2 (H-240) is a rabbit polyclonal antibody raised against amino acids 1-240 mapping at the N-terminus of Cdt2 of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

Cdt2 (H-240) is recommended for detection of Cdt2 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)], 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).

Cdt2 (H-240) is also recommended for detection of Cdt2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Cdt2 siRNA (h): sc-72852, Cdt2 siRNA (m): sc-72853, Cdt2 shRNA Plasmid (h): sc-72852-SH, Cdt2 shRNA Plasmid (m): sc-72853-SH, Cdt2 shRNA (h) Lentiviral Particles: sc-72852-V and Cdt2 shRNA (m) Lentiviral Particles: sc-72853-V.

Molecular Weight of Cdt2: 85 kDa.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.



Try **Cdt2 (B-8): sc-166735**, our highly recommended monoclonal alternative to Cdt2 (H-240).