

Cdc34B (K-14): sc-167439

BACKGROUND

The eukaryotic cell division cycle consists of a number of gene-controlled sequences that involve cyclin dependent kinases (Cdks) and cell division control (Cdc) proteins. Cdc34B, also known as UBE2R2 (ubiquitin-conjugating enzyme E2 R2) or UBC3B, is a 238 amino acid member of the E2 ubiquitin-conjugating enzyme family. Similar to Cdc34, Cdc34B functions to catalytically attach ubiquitin to various proteins, such as β -TrCP (an F-box protein that mediates β -catenin degradation), via an ATP-dependent reaction that yields AMP, a diphosphate and a ubiquitin-tagged protein. Cdc34B can be phosphorylated by the protein kinase CK2 (casein kinase II), thereby allowing Cdc34B to regulate β -TrCP substrate recognition and, ultimately, enhance β -catenin degradation. Due to its ability to control β -TrCP activity, Cdc34B is thought to play a key role in cell cycle progression.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UBE2R2 (human) mapping to 9p13.3; Ube2r2 (mouse) mapping to 4 A5.

SOURCE

Cdc34B (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Cdc34B of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-167439 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cdc34B (K-14) is recommended for detection of Cdc34B 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); non cross-reactive with Cdc34.

Cdc34B (K-14) is also recommended for detection of Cdc34B in additional species, including canine.

Suitable for use as control antibody for Cdc34B siRNA (h): sc-105193, Cdc34B siRNA (m): sc-142209, Cdc34B shRNA Plasmid (h): sc-105193-SH, Cdc34B shRNA Plasmid (m): sc-142209-SH, Cdc34B shRNA (h) Lentiviral Particles: sc-105193-V and Cdc34B shRNA (m) Lentiviral Particles: sc-142209-V.

Molecular Weight of Cdc34B: 27 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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.

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.