

# Cdc34B (L12): sc-81828

## 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  $\beta$ -TrCP (an F-box protein that mediates  $\beta$ -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  $\beta$ -TrCP substrate recognition and, ultimately, enhance  $\beta$ -catenin degradation. Due to its ability to control  $\beta$ -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.

## SOURCE

Cdc34B (L12) is a mouse monoclonal antibody raised against recombinant Cdc34B of human origin.

## PRODUCT

Each vial contains 50  $\mu$ g IgG<sub>2b</sub> in 500  $\mu$ l of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Cdc34B (L12) is recommended for detection of Cdc34B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

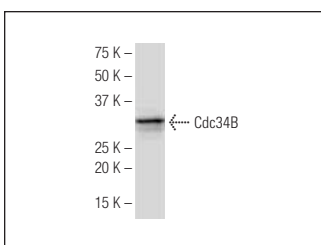
Molecular Weight of Cdc34B: 27 kDa.

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 goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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).

## DATA



Cdc34B (L12): sc-81828. Western blot analysis of Cdc34B expression in Jurkat whole cell lysate.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.