

# Cdc50B (S-15): sc-164014

## BACKGROUND

Cdc50B (cell cycle control protein 50B), also known as TMEM30B (transmembrane protein 30B), is a 351 amino acid multi-pass membrane protein that belongs to the CDC50/LEM3 family. The gene that encodes Cdc50B consists of approximately 4,443 bases and maps to human chromosome 14q23.1. Housing over 700 genes, chromosome 14 comprises nearly 3.5% of the human genome. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder  $\alpha$ 1-antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction. An inversion of the long arm of chromosome 14 is thought to be involved in T-cell chronic lymphocytic leukemia (CLL), a cancer that affects T lymphocytes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TMEM30B (human) mapping to 14q23.1; Tmem30b (mouse) mapping to 12 C3.

## SOURCE

Cdc50B (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Cdc50B of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-164014 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Cdc50B (S-15) is recommended for detection of Cdc50B 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 Cdc50A or Cdc50C.

Suitable for use as control antibody for Cdc50B siRNA (h): sc-92313, Cdc50B siRNA (m): sc-142216, Cdc50B shRNA Plasmid (h): sc-92313-SH, Cdc50B shRNA Plasmid (m): sc-142216-SH, Cdc50B shRNA (h) Lentiviral Particles: sc-92313-V and Cdc50B shRNA (m) Lentiviral Particles: sc-142216-V.

Molecular Weight of Cdc50B: 39 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.