## SANTA CRUZ BIOTECHNOLOGY, INC.

# CCDC19 (L-17): sc-163998



-----

#### BACKGROUND

CCDC19 is a 466 amino acid protein encoded by a gene mapping to human chromosome 1. Chromosome 1 is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1 and, considering the great number of genes, there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes Lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinson's, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

#### REFERENCES

- Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
- Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433.
- Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.

#### CHROMOSOMAL LOCATION

Genetic locus: CCDC19 (human) mapping to 1q23.2; Ccdc19 (mouse) mapping to 1 H3.

#### SOURCE

CCDC19 (L-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCDC19 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-163998 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### APPLICATIONS

CCDC19 (L-17) is recommended for detection of CCDC19 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); non cross-reactive with other CCDC family members.

CCDC19 (L-17) is also recommended for detection of CCDC19 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CCDC19 siRNA (h): sc-88245, CCDC19 siRNA (m): sc-142093, CCDC19 shRNA Plasmid (h): sc-88245-SH, CCDC19 shRNA Plasmid (m): sc-142093-SH, CCDC19 shRNA (h) Lentiviral Particles: sc-88245-V and CCDC19 shRNA (m) Lentiviral Particles: sc-142093-V.

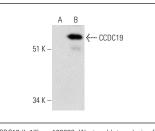
Molecular Weight of CCDC19: 56 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or CCDC19 (h): 293 Lysate: sc-114189 .

### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### DATA



CCDC19 (L-17): sc-163998. Western blot analysis of CCDC19 expression in non-transfected: sc-110760 (A) and human CCDC19 transfected: sc-114189 (B) 293 whole cell lysates.

#### **RESEARCH USE**

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