

# CCDC42 (P-13): sc-240204

## BACKGROUND

The coiled-coil domain is a structural motif found in proteins that are involved in a diverse array of biological functions such as the regulation of gene expression, cell division, membrane fusion and drug extrusion and delivery. CCDC42 (coiled-coil domain containing 42) is a 316 amino acid protein encoded by a gene that maps to human chromosome 17p13.1. Encoding over 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome.

## REFERENCES

1. Smith, M.L., et al. 1996. Mammalian DNA damage-inducible genes associated with growth arrest and apoptosis. *Mutat. Res.* 340: 109-124.
2. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 17. Genet. Test.* 2: 357-381.
3. Komarova, E.A., et al. 1998. Could p53 be a target for therapeutic suppression? *Semin. Cancer Biol.* 8: 389-400.
4. Ben-Porath, I., et al. 2005. The signals and pathways activating cellular senescence. *Int. J. Biochem. Cell Biol.* 37: 961-976.
5. Wang, J., et al. 2010. MCM3AP, a novel HBV integration site in hepatocellular carcinoma and its implication in hepatocarcinogenesis. *J. Huazhong Univ. Sci. Technol. Med. Sci.* 30: 425-429.

## CHROMOSOMAL LOCATION

Genetic locus: *Ccdc42* (mouse) mapping to 11 B3.

## SOURCE

CCDC42 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CCDC42 of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-240204 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

CCDC42 (P-13) is recommended for detection of CCDC42 of mouse and rat 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 other CCDC family members.

Suitable for use as control antibody for CCDC42 siRNA (m): sc-142111, CCDC42 shRNA Plasmid (m): sc-142111-SH and CCDC42 shRNA (m) Lentiviral Particles: sc-142111-V.

Molecular Weight of CCDC42: 38 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™ 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.