

CCDC57 (E-12): sc-136608

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. CCDC57 (coiled-coil domain containing 57) is a 916 amino acid protein that exists as 2 alternatively spliced isoforms. The gene encoding CCDC57 maps to human chromosome 17q25.3. 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. and Fornace, A.J. 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. and Gudkov, A.V. 1998. Could p53 be a target for therapeutic suppression? *Semin. Cancer Biol.* 8: 389-400.
4. Ben-Porath, I. and Weinberg, R.A. 2005. The signals and pathways activating cellular senescence. *Int. J. Biochem. Cell Biol.* 37: 961-976.
5. Wang, J., Lin, J., Chang, Y., Li, P. and Yang, Y. 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: CCDC57 (human) mapping to 17q25.3; Ccdc57 (mouse) mapping to 11 E2.

SOURCE

CCDC57 (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CCDC57 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136608 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.

APPLICATIONS

CCDC57 (E-12) is recommended for detection of CCDC57 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) 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 CCDC57 siRNA (h): sc-94152, CCDC57 siRNA (m): sc-142123, CCDC57 shRNA Plasmid (h): sc-94152-SH, CCDC57 shRNA Plasmid (m): sc-142123-SH, CCDC57 shRNA (h) Lentiviral Particles: sc-94152-V and CCDC57 shRNA (m) Lentiviral Particles: sc-142123-V.

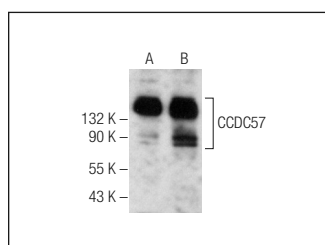
Molecular Weight of CCDC57 isoforms: 103/85 kDa.

Positive Controls: CCDC57 (h): 293T Lysate: sc-111925.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CCDC57 (E-12): sc-136608. Western blot analysis of CCDC57 expression in non-transfected: sc-117752 (A) and human CCDC57 transfected: sc-111925 (B) 293T whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.