# CCDC67 (C-17): sc-246185



The Power to Question

### **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. CCDC67 (coiled-coil domain-containing protein 67) is a 604 amino acid protein that is encoded by a gene which maps to human chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene.

### **REFERENCES**

- Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. Am. J. Med. Genet. A 129: 51-61.
- Loussouarn, G., et al. 2006. KCNQ1 K+ channel-mediated cardiac channelopathies. Methods Mol. Biol. 337: 167-183.
- Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
- Zehelein, J., et al/ 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. J. Biol. Chem. 281: 35397-35403.
- 5. Ataga, K.I., et al. 2007.  $\beta$ -thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. Br. J. Haematol. 139: 3-13.
- Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick Type C proteins depends on the adaptor complex AP-3. J. Cell Sci. 120: 3640-3652.

# **CHROMOSOMAL LOCATION**

Genetic locus: CCDC67 (human) mapping to 11q21; Ccdc67 (mouse) mapping to 9 A2.

## **SOURCE**

CCDC67 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CCDC67 of human origin.

# **PRODUCT**

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

Blocking peptide available for competition studies, sc-246185 P, (100  $\mu$ g 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.

#### **APPLICATIONS**

CCDC67 (C-17) is recommended for detection of CCDC67 of mouse, rat and 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)], 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.

CCDC67 (C-17) is also recommended for detection of CCDC67 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CCDC67 siRNA (h): sc-96673, CCDC67 siRNA (m): sc-142133, CCDC67 shRNA Plasmid (h): sc-96673-SH, CCDC67 shRNA Plasmid (m): sc-142133-SH, CCDC67 shRNA (h) Lentiviral Particles: sc-96673-V and CCDC67 shRNA (m) Lentiviral Particles: sc-142133-V.

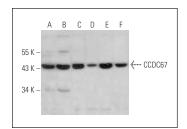
Molecular Weight of CCDC67 isoforms: 71/40 kDa.

Positive Controls: ACHN whole cell lysate: sc-364365, A549 cell lysate: sc-2413 or K-562 whole cell lysate: sc-2203.

### **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) 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™ Mounting Medium: sc-24941.

# DATA



CCDC67 (C-17): sc-246185. Western blot analysis of CCDC67 expression in ACHN (A), A549 (B), HeLa (C), Jurkat (D), K-562 (E) and Hep G2 (F) whole cell lysates.

### **RESEARCH USE**

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

#### **PROTOCOLS**

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