CCDC8 (C-16): sc-242376



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. CCDC8 (coiled-coil domain-containing protein 8) is a 538 amino acid protein that is phosphorylated upon DNA damage, likely by ATM or ATR. The gene encoding CCDC8 maps to human chromosome 19, which consists of over 63 million bases and houses approximately 1,400 genes. Chromosome 19 is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). Key genes for eye color and hair color also map to chromosome 19.

REFERENCES

- Olsen, A., et al. 1994. Gene organization of the pregnancy-specific glycoprotein region on human chromosome 19: assembly and analysis of a 700-kb cosmid contig spanning the region. Genomics 23: 659-668.
- Teglund, S., et al. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. Genomics 23: 669-684.
- Wang, L., et al. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. Clin. Cancer Res. 6: 2988-2993.
- Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
- 5. Leeb, T. and Müller, M. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. Gene 343: 239-244.
- Strauss, H.M. and Keller, S. 2008. Pharmacological interference with protein-protein interactions mediated by coiled-coil motifs. Handb. Exp. Pharmacol. 186: 461-482.
- McFarlane, A.A., et al. 2009. The use of coiled-coil proteins in drug delivery systems. Eur. J. Pharmacol. 625: 101-107.
- 8. Banci, L., et al. 2009. The coiled coil-helix-coiled coil-helix proteins may be redox proteins. FEBS Lett. 583: 1699-1702.

CHROMOSOMAL LOCATION

Genetic locus: CCDC8 (human) mapping to 19q13.32.

SOURCE

CCDC8 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CCDC8 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Blocking peptide available for competition studies, sc-242376 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCDC8 (C-16) is recommended for detection of CCDC8 of 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.

Suitable for use as control antibody for CCDC8 siRNA (h): sc-97657, CCDC8 shRNA Plasmid (h): sc-97657-SH and CCDC8 shRNA (h) Lentiviral Particles: sc-97657-V.

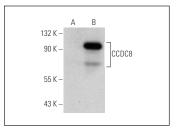
Molecular Weight of CCDC8: 59 kDa.

Positive Controls: CCDC8 (h): 293T Lysate: sc-177038.

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



CCDC8 (C-16): sc-242376. Western blot analysis of CCDC8 expression in non-transfected: sc-117752 (A) and human CCDC8 transfected: sc-177038 (B) 293T whole cell lysates.

RESEARCH USE

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