

CCDC142 (E-16): sc-246103

BACKGROUND

CCDC142 (coiled-coil domain containing 142), also known as FLJ14397, is a 750 amino acid protein expressed as 3 isoforms produced by alternative splicing events. The gene that encodes CCDC142 maps to human chromosome 2p13.1. The second largest human chromosome, chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

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CHROMOSOMAL LOCATION

Genetic locus: CCDC142 (human) mapping to 2p13.1; Ccdc142 (mouse) mapping to 6 C3.

SOURCE

CCDC142 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCDC142 of human 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-246103 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCDC142 (E-16) is recommended for detection of CCDC142 of mouse, rat and human 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.

CCDC142 (E-16) is also recommended for detection of CCDC142 in additional species, including equine and porcine.

Suitable for use as control antibody for CCDC142 siRNA (h): sc-94789, CCDC142 siRNA (m): sc-142083, CCDC142 shRNA Plasmid (h): sc-94789-SH, CCDC142 shRNA Plasmid (m): sc-142083-SH, CCDC142 shRNA (h) Lentiviral Particles: sc-94789-V and CCDC142 shRNA (m) Lentiviral Particles: sc-142083-V.

Molecular Weight of CCDC142 isoforms: 82/81/72 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.

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.