CCDC82 (P-15): sc-167416



The Power to Question

BACKGROUND

CCDC82 (coiled-coil domain-containing protein 82) is a 544 amino acid protein that exists as 2 alternatively spliced isoforms. Upon DNA damage, CCDC82 gets phosphorylated most likely by Atm or ATR. The gene that encodes CCDC82 consists of more than 37,000 bases and maps to human chromosome 11q21. Chromosome 11, which comprises approximately 4% of human genomic DNA, 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. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CCDC82 (human) mapping to 11q21; Ccdc82 (mouse) mapping to 9.

SOURCE

CCDC82 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CCDC82 of human origin.

RESEARCH USE

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

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-167416 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCDC82 (P-15) is recommended for detection of CCDC82 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.

CCDC82 (P-15) is also recommended for detection of CCDC82 in additional species, including canine and porcine.

Suitable for use as control antibody for CCDC82 siRNA (h): sc-96465, CCDC82 shRNA Plasmid (h): sc-96465-SH and CCDC82 shRNA (h) Lentiviral Particles: sc-96465-V.

Molecular Weight of CCDC82 isoforms: 64/40 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) 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.

PROTOCOLS

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

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