

# CCDC81 (Q-19): sc-246193

## BACKGROUND

CCDC81 (coiled-coil domain-containing protein 81) is a 652 amino acid protein that exists as 3 alternatively spliced isoforms. The gene that encodes CCDC81 consists of more than 48,000 bases and maps to human chromosome 11q14.2. Chromosome 11, which comprises approximately 4% of the human genome, 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: *CCDC81* (human) mapping to 11q14.2; *Ccdc81* (mouse) mapping to 7 E1.

## SOURCE

CCDC81 (Q-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of *CCDC81* 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-246193 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CCDC81 (Q-19) is recommended for detection of CCDC81 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.

Suitable for use as control antibody for CCDC81 siRNA (h): sc-96344, CCDC81 siRNA (m): sc-142146, CCDC81 shRNA Plasmid (h): sc-96344-SH, CCDC81 shRNA Plasmid (m): sc-142146-SH, CCDC81 shRNA (h) Lentiviral Particles: sc-96344-V and CCDC81 shRNA (m) Lentiviral Particles: sc-142146-V.

Molecular Weight of CCDC81 isoforms: 76/66/46 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.