

CCDC38 (T-14): sc-137374

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. CCDC38 (coiled-coil domain containing 38) is a 563 amino acid protein encoded by a gene that maps to human chromosome 12q23.1. Encoding over 1,100 genes, chromosome 12 comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

- Allen, T.L., et al. 1996. Cytogenetic and molecular analysis in trisomy 12p. *Am. J. Med. Genet.* 63: 250-256.
- Gilbert, F. and Kauff, N. 2000. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 12. Genet. Test.* 4: 319-333.
- Montgomery, K.T., et al. 2001. A high-resolution map of human chromosome 12. *Nature* 409: 945-946.
- Mason, J.M. and Arndt, K.M. 2004. Coiled coil domains: stability, specificity, and biological implications. *ChemBiochem.* 5: 170-176.
- Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. *Nat. Genet.* 36: 40-45.
- Riaz, N., et al. 2005. Genomewide significant linkage to stuttering on chromosome 12. *Am. J. Hum. Genet.* 76: 647-651.
- Scherer, S.E., et al. 2006. The finished DNA sequence of human chromosome 12. *Nature* 440: 346-351.
- Liu, J., et al. 2006. A seven-helix coiled coil. *Proc. Natl. Acad. Sci. USA* 103: 15457-15462.

CHROMOSOMAL LOCATION

Genetic locus: CCDC38 (human) mapping to 12q23.1; Ccdc38 (mouse) mapping to 10 C2.

SOURCE

CCDC38 (T-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CCDC38 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137374 P, (100 µg 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

CCDC38 (T-14) is recommended for detection of CCDC38 of mouse and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CCDC family members.

CCDC38 (T-14) is also recommended for detection of CCDC38 in additional species, including canine and porcine.

Suitable for use as control antibody for CCDC38 siRNA (h): sc-95669, CCDC38 siRNA (m): sc-142107, CCDC38 shRNA Plasmid (h): sc-95669-SH, CCDC38 shRNA Plasmid (m): sc-142107-SH, CCDC38 shRNA (h) Lentiviral Particles: sc-95669-V and CCDC38 shRNA (m) Lentiviral Particles: sc-142107-V.

Molecular Weight of CCDC38: 65 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.