SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC3 (D-12): sc-241341

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CCDC3 (coiled-coil domain containing 23), also known as Favine (Fat/vessel-derived secretory protein), is a 270 amino acid secreted protein that forms a dimer complex and likely functions in fat metabolism. Expression of CCDC3 is upregulated by Insulin and the PPARγ agonist, pioglitazone, and is supressed by isoproterenol, norepinephrine and TNF-α. Enhancing the evidence that expression is linked to hormonal-nutritional alterations is the fact that CCDC3 mRNA levels are increased in adipose tissues of obese mice. The gene encoding CCDC3 maps to human chromosome 10, which spans nearly 135 million base pairs and makes up approximately 4.5% of the total DNA in cells. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

1. Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. Cytogenet. Cell Genet. 90: 1-12.
2. Gilbert, F. 2001. Chromosome 10. Genet. Test. 5: 69-82.
3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
4. Nonneman, D., et al. 2004. Comparative mapping of human chromosome 10 to pig chromosomes 10 and 14. Anim. Genet. 35: 338-343.
5. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. Nature 429: 375-381.
6. Kobayashi, S., et al. 2010. Identification of a new secretory factor, CCDC3/Favine, in adipocytes and endothelial cells. Biochem. Biophys. Res. Commun. 392: 29-35.
7. Eberlein, A., et al. 2010. Analysis of structure and gene expression of bovine CCDC3 gene indicates a function in fat metabolism. Comp. Biochem. Physiol. B, Biochem. Mol. Biol. 156: 19-25.

CHROMOSOMAL LOCATION

Genetic locus: CCDC3 (human) mapping to 10p13; Ccdc3 (mouse) mapping to 2 A1.

SOURCE

CCDC3 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCDC3 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.

PROTOCOLS

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

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-241341 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCDC3 (D-12) is recommended for detection of CCDC3 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.

CCDC3 (D-12) is also recommended for detection of CCDC3 in additional species, including bovine.

Suitable for use as control antibody for CCDC3 siRNA (h): sc-90797, CCDC3 siRNA (m): sc-142101, CCDC3 shRNA Plasmid (h): sc-90797-SH, CCDC3 shRNA Plasmid (m): sc-142101-SH, CCDC3 shRNA (h) Lentiviral Particles: sc-90797-V and CCDC3 shRNA (m) Lentiviral Particles: sc-142101-V.

Molecular Weight of CCDC3: 31 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.

RESEARCH USE

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