SANTA CRUZ BIOTECHNOLOGY, INC.

CTF8 (G-12): sc-160258

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CTF8 (chromosome transmission fidelity factor 8), also known as DERPC (decreased expression in renal and prostate cancer protein), is a 524 amino acid nuclear protein that inhibits the overexpression of prostate tumor cell growth and is therefore implicated as a tumor suppressor. Existing as two alternatively spliced isoforms, CTF8 is ubiquitously expressed, with highest levels found in ovary, heart, kidney, skeletal muscle, liver and testis, and moderate levels found in prostate. CTF8 is a member of the DERPC family and is encoded by a gene that maps to human chromosome 16q22.1. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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2. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
3. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.
4. Merkle, C.J., et al. 2003. Cloning and characterization of hCTF18, hCTF8, and hDCC1. Human homologs of a *Saccharomyces cerevisiae* complex involved in sister chromatid cohesion establishment. J. Biol. Chem. 278: 30051-30056.
5. Bermudez, V.P., et al. 2003. The alternative Ctf18-Dcc1-Ctf8-replication factor C complex required for sister chromatid cohesion loads proliferating cell nuclear antigen onto DNA. Proc. Natl. Acad. Sci. USA 100: 10237-10242.
6. Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. Curr. Gastroenterol. Rep. 6: 467-473.
7. Mathew, C.G., et al. 2004. Genetics of inflammatory bowel disease: progress and prospects. Hum. Mol. Genet. : R161-R168.

CHROMOSOMAL LOCATION

Genetic locus: CHTF8 (human) mapping to 16q22.1; Chtf8 (mouse) mapping to 8 D3.

SOURCE

CTF8 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CTF8 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-160258 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTF8 (G-12) is recommended for detection of CTF8 of human origin and 5830457O10Rik of mouse origin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 CTF18.

CTF8 (G-12) is also recommended for detection of CTF8 of human origin and 5830457O10Rik of mouse origin in additional species, including bovine.

Suitable for use as control antibody for CTF8 siRNA (h): sc-93075, Ctf8 siRNA (m): sc-140413, CTF8 shRNA Plasmid (h): sc-93075-SH, Ctf8 shRNA Plasmid (m): sc-140413-SH, CTF8 shRNA (h) Lentiviral Particles: sc-93075-V and Ctf8 shRNA (m) Lentiviral Particles: sc-140413-V.

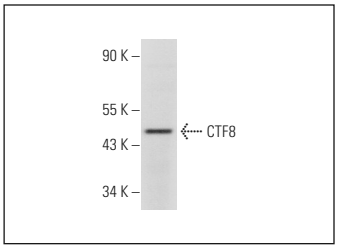
Molecular Weight of CTF8: 51 kDa.

Positive Controls: mouse kidney extract: sc-2255.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CTF8 (G-12): sc-160258. Western blot analysis of CTF8 expression in mouse kidney tissue extract.

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.