SANTA CRUZ BIOTECHNOLOGY, INC.

APCDD1 (D-17): sc-84694

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

APCDD1 (adenomatosis polyposis coli downregulated 1), also known as B7323, DRAPC1 or FP7019, is a 514 amino acid single-pass type I membrane protein whose transcription is regulated by the β-catenin/ITF-2 complex. Expressed in high levels in ovary, heart, pancreas and prostate, with lower levels in spleen, lung, kidney, liver and colon, APCDD1 is thought to function as a developmental target of the β-catenin pathway and may play an important role in colorectal tumorigenesis. The gene encoding human APCDD1 maps to chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiec-tasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

1. Carstea, E.D., et al. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. Proc. Natl. Acad. Sci. USA 90: 2002-2004.
2. Takahashi, M., et al. 2002. Isolation of a novel human gene, APCDD1, as a direct target of the β-catenin/T-cell factor 4 complex with probable involvement in colorectal carcinogenesis. Cancer Res. 62: 5651-5656.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607479. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Petek, E., et al. 2003. Characterisation of a 19-year-old "long-term survivor" with Edwards syndrome. Genet. Couns. 14: 239-244.
5. Raghavan, S.C., et al. 2004. A non-B-DNA structure at the Bcl-2 major breakpoint region is cleaved by the RAG complex. Nature 428: 88-93.
6. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. Am. J. Med. Genet. A 134: 88-94.

CHROMOSOMAL LOCATION

Genetic locus: APCDD1 (human) mapping to 18p11.22; Apcdd1 (mouse) mapping to 18 E1.

SOURCE

APCDD1 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of APCDD1 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-84694 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

APCDD1 (D-17) is recommended for detection of APCDD1 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).

Suitable for use as control antibody for APCDD1 siRNA (h): sc-72512, APCDD1 siRNA (m): sc-141147, APCDD1 shRNA Plasmid (h): sc-72512-SH, APCDD1 shRNA Plasmid (m): sc-141147-SH, APCDD1 shRNA (h) Lentiviral Particles: sc-72512-V and APCDD1 shRNA (m) Lentiviral Particles: sc-141147-V.

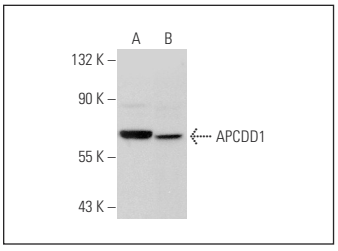
Molecular Weight of APCDD1: 59 kDa.

Positive Controls: NCI-H226 whole cell lysate: sc-364256 or HeLa whole cell lysate: sc-2200.

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



APCDD1 (D-17): sc-84694. Western blot analysis of APCDD1 expression in NCI-H226 (**A**) and HeLa (**B**) whole cell lysates.

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.