

APCDD1 (E-17): sc-84695

BACKGROUND

APCDD1 (adenomatosis polyposis coli down-regulated 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 telangiectasia, 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.
7. Aurizi, C., et al. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. *Mol. Genet. Metab.* 90: 402-407.
8. Broderick, P., et al. 2007. A genome-wide association study shows that common alleles of SMAD7 influence colorectal cancer risk. *Nat. Genet.* 39: 1315-1317.
9. Kamal, A.H., et al. 2007. Hereditary hemorrhagic telangiectasia. *Mayo Clin. Proc.* 82: 1364.

CHROMOSOMAL LOCATION

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

SOURCE

APCDD1 (E-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 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84695 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

APCDD1 (E-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), 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).

APCDD1 (E-17) is also recommended for detection of APCDD1 in additional species, including equine, canine, bovine, porcine and avian.

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.

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 or our catalog for detailed protocols and support products.