

PTCD2 (N-12): sc-169066

BACKGROUND

PTCD2 (pentatricopeptide repeat domain 2) is a 388 amino acid protein that contains one PPR (pentatricopeptide) repeat and belongs to the PTCD2 family. The gene encoding PTCD2 maps to human chromosome 5q13.2 and mouse chromosome 13 D1. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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- Finch, R., et al. 2005. Familial adenomatous polyposis and mental retardation caused by a *de novo* chromosomal deletion at 5q15-q22: report of a case. *Dis. Colon Rectum* 48: 2148-2152.
- Anindya, R., et al. 2007. Damage-induced ubiquitylation of human RNA polymerase II by the ubiquitin ligase Nedd4, but not Cockayne syndrome proteins or BRCA1. *Mol. Cell* 28: 386-397.
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- Ravandi, F., et al. 2009. Superior outcome with hypomethylating therapy in patients with acute myeloid leukemia and high-risk myelodysplastic syndrome and chromosome 5 and 7 abnormalities. *Cancer* 115: 5746-5751.

CHROMOSOMAL LOCATION

Genetic locus: PTCD2 (human) mapping to 5q13.2; Ptc2 (mouse) mapping to 13 D1.

SOURCE

PTCD2 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PTCD2 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.

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-169066 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PTCD2 (N-12) is recommended for detection of PTCD2 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 PTCD1 or PTCD3.

PTCD2 (N-12) is also recommended for detection of PTCD2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for PTCD2 siRNA (h): sc-91597, PTCD2 siRNA (m): sc-152572, PTCD2 shRNA Plasmid (h): sc-91597-SH, PTCD2 shRNA Plasmid (m): sc-152572-SH, PTCD2 shRNA (h) Lentiviral Particles: sc-91597-V and PTCD2 shRNA (m) Lentiviral Particles: sc-152572-V.

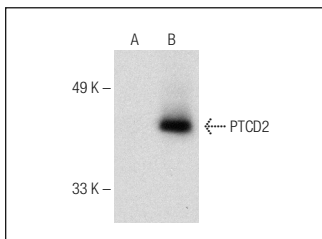
Molecular Weight of PTCD2: 44 kDa.

Positive Controls: PTCD2 (m): 293T Lysate: sc-122833.

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



PTCD2 (N-12): sc-169066. Western blot analysis of PTCD2 expression in non-transfected: sc-117752 (A) and mouse PTCD2 transfected: sc-122833 (B) 293T whole cell lysates.

RESEARCH USE

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