

PRCD (P-16): sc-169029

BACKGROUND

PRCD (progressive rod-cone degeneration), also known as RP36, is a 54 amino acid single-pass membrane protein, with the first 28 amino acids completely conserved between human and canine. PRCD contains an N-terminal signal peptide, a C-terminal transmembrane domain and four exons, the last of which is noncoding. The promoter region of PRCD consists of several putative TATA boxes and CAAT motifs, as well as binding sites for 36 different transcription factors. Localizing to cytoplasm, PRCD is predominantly expressed in retina. Defects in PRCD may cause retinitis pigmentosa type 36, a retinal dystrophy characterized by retinal pigment deposits visible on fundus examination and primary loss of rod photoreceptor cells, followed by secondary loss of cone photoreceptors. Night vision blindness and loss of midperipheral visual field also typically occur. As retinitis pigmentosa type 36 progresses, far peripheral visual field and central vision are also lost. The gene that encodes PRCD maps to human chromosome 17q25.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRCD (human) mapping to 17q25.1.

SOURCE

PRCD (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRCD 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-169029 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRCD (P-16) is recommended for detection of PRCD of 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).

Suitable for use as control antibody for PRCD siRNA (h): sc-106951, PRCD shRNA Plasmid (h): sc-106951-SH and PRCD shRNA (h) Lentiviral Particles: sc-106951-V.

Molecular Weight of PRCD: 6 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.