

PRCC (A-20): sc-21254

BACKGROUND

PRCC (papillary renal cell carcinoma) is a disorder which is marked by multiple tumors of varying size present in both kidneys of affected family members. The specific chromosomal translocation t(X;1)(p11.2;q21.2) observed in human PRCC results in the fusion of a PRCC gene at 1q21.2, to the TFE3 gene at Xp11.2. The translocation is predicted to result in the fusion of the amino-terminal region of the PRCC protein, which includes a proline-rich domain, to the entire TFE3 protein. PRCC is ubiquitously expressed in normal adult and fetal tissues and encodes a putative protein of 491 amino acids with a relatively high content of prolines. PRCC colocalizes within the nucleus with Sm pre-mRNA splicing factors and associates with a variety of pre-mRNA splicing factors. PRCC, usually a low-grade neoplasm, may be associated with cystic degeneration, hemorrhage and presence of abundant hemosiderin-laden macrophages (HLM).

REFERENCES

1. Sidhar, S.K., Clark, J., Gill, S., Hamoudi, R., Crew, A.J., Gwilliam, R., Ross, M., Linehan, W.M., Birdsall, S., Shipley, J. and Cooper, C.S. 1996. The t(X;1)(p11.2;q21.2) translocation in papillary renal cell carcinoma fuses a novel gene PRCC to the TFE3 transcription factor gene. *Hum. Mol. Genet.* 5: 1333-1338.
2. Weterman, M.A., Wilbrink, M. and Geurts van Kessel, A. 1996. Fusion of the transcription factor TFE3 gene to a novel gene, PRCC, in t(X;1)(p11;q21)-positive papillary renal cell carcinomas. *Proc. Natl. Acad. Sci. USA* 93: 15294-15298.
3. Skalsky, Y.M., Ajuh, P.M., Parker, C., Lamond, A.I., Goodwin, G. and Cooper, C.S. 2001. PRCC, the commonest TFE3 fusion partner in papillary renal carcinoma is associated with pre-mRNA splicing factors. *Oncogene* 20: 178-187.
4. Wang, S., Filipowicz, E.A. and Schnadig, V.J. 2001. Abundant intracytoplasmic hemosiderin in both histiocytes and neoplastic cells: a diagnostic pitfall in fine-needle aspiration of cystic papillary renal-cell carcinoma. *Diagn. Cytopathol.* 24: 82-85.
5. LocusLink Report (LocusID: 179755). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: PRCC (human) mapping to 1q23.1; Prcc (mouse) mapping to 3 F1.

SOURCE

PRCC (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRCC 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-21254 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRCC (A-20) is recommended for detection of PRCC 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).

PRCC (A-20) is also recommended for detection of PRCC in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PRCC siRNA (h): sc-40867, PRCC siRNA (m): sc-40868, PRCC shRNA Plasmid (h): sc-40867-SH, PRCC shRNA Plasmid (m): sc-40868-SH, PRCC shRNA (h) Lentiviral Particles: sc-40867-V and PRCC shRNA (m) Lentiviral Particles: sc-40868-V.

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.