PRCC (h): 293 Lysate: sc-111014



The Power to Question

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 1q23.1, 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

- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: PRCC (human) mapping to 1q23.1.

PRODUCT

PRCC (h): 293 Lysate represents a lysate of human PRCC transfected 293 cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

APPLICATIONS

PRCC (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive PRCC antibodies. Recommended use: 10-20 μ l per lane.

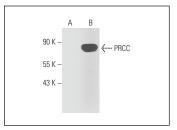
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PRCC (D-3): sc-390527 is recommended as a positive control antibody for Western Blot analysis of enhanced human PRCC expression in PRCC transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PRCC (D-3): sc-390527. Western blot analysis of PRCC expression in non-transfected: sc-110760 (A) and human PRCC transfected: sc-111014 (B) 293 whole cell Ivsates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com