## BACKGROUND

Prostate secretory protein, also designated PSP94, is a 94 amino acid protein that is expressed abundantly in semen. PSP94 has local functions within the reproductive tract as well as many systemic functions. Low levels of PSP94 are associated with the advance of prostate cancer, a common malignancy that is often associated with skeletal metastases resulting in significant morbidity and mortality. PSP94 may be a useful tool for the management of a sub-population of low-stage and low-grade prostatic carcinoma and its associated complications.

## REFERENCES

1. Wright, G.L., et al. 1990. Generation and characterization of monoclonal antibodies to prostate secretory protein. Int. J. Cancer 46: 39-49.
2. Huang, C.L., et al. 1992. Two-site monoclonal antibody-based immunoradiometric assay for measuring prostate secretory protein in serum. Clin. Chem. 38: 817-823.
3. Huang, C.L., et al. 1993. Comparison of prostate secretory protein with prostate specific antigen and prostatic acid phosphatase as a serum biomarker for diagnosis and monitoring patients with prostate carcinoma. Prostate 23: 201-212.
4. Shukeir, N., et al. 2003. Prostate secretory protein PSP94 decreases tumor growth and hypercalcemia of malignancy in a syngenic in vivo model of prostate cancer. Cancer Res. 63: 2072-2078.
5. Reeves, J.R., et al. 2004. Identification, purification and characterization of a novel human blood protein with binding affinity for prostate secretory protein of 94 amino acids. Biochem. J. 385: 105-114.
6. Shukeir, N., et al. 2004. A synthetic 15-mer peptide (PCK3145) derived from prostate secretory protein can reduce tumor growth, experimental skeletal metastases, and malignancy-associated hypercalcemia. Cancer Res. 64: 5370-5377.
7. Girvan, A.R., et al. 2005. Increased intratumoral expression of prostate secretory protein of 94 amino acids predicts for worse disease recurrence and progression after radical prostatectomy in patients with prostate cancer. Urology 65: 719-723.

## CHROMOSOMAL LOCATION

Genetic locus: MSMB (human) mapping to $10 q 11.23$.

## SOURCE

PSP94 (H-114) is a rabbit polyclonal antibody raised against amino acids 50-102 of PSP94 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glg}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

PSP94 (H-114) is recommended for detection of PSP94 of mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ 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).

Suitable for use as control antibody for PSP94 siRNA (m): sc-76281, PSP94 shRNA Plasmid (m): sc-76281-SH and PSP94 shRNA (m) Lentiviral Particles: sc-76281-V.

Molecular Weight of PSP94: 10.7 kDa .
Positive Controls: human prostate tissue extract: sc-363774.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible goat antirabbit IgG-HRP: sc-2030 (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 $/ 2.0 \mathrm{ml}$ ). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



PSP94 (H-114): sc-68920. Western blot analysis of
PSP94 expression in human prostate tissue extract.

## 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.

Try PSP94 (F-1): sc-390855 or PSP94 (A-8):
sc-390661, our highly recommended monoclonal alternatives to PSP94 (H-114).

