

# PSP94 (A-8): sc-390661

## 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 PSP-94 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.
8. Shukeir, N., et al. 2005. Prostate secretory protein of 94 amino acids (PSP-94) and its peptide (PCK3145) as potential therapeutic modalities for prostate cancer. *Anticancer Drugs* 16: 1045-1051.
9. Nam, R.K., et al. 2006. A novel serum marker, total prostate secretory protein of 94 amino acids, improves prostate cancer detection and helps identify high grade cancers at diagnosis. *J. Urol.* 175: 1291-1297.

## CHROMOSOMAL LOCATION

Genetic locus: MSMB (human) mapping to 10q11.23.

## SOURCE

PSP94 (A-8) is a mouse monoclonal antibody raised against amino acids 50-102 of PSP94 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

PSP94 (A-8) is recommended for detection of PSP94 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PSP94 siRNA (h): sc-76280, PSP94 shRNA Plasmid (h): sc-76280-SH and PSP94 shRNA (h) Lentiviral Particles: sc-76280-V.

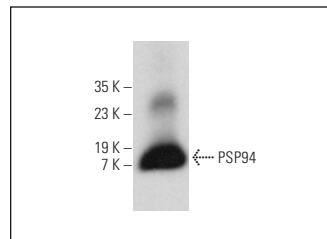
Molecular Weight of PSP94: 11 kDa.

Positive Controls: human prostate extract: sc-363774.

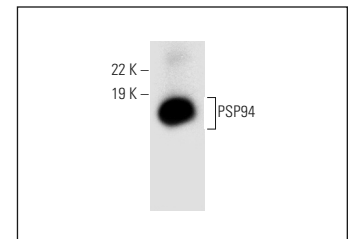
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



PSP94 (A-8): sc-390661. Western blot analysis of PSP94 expression in human prostate tissue extract. Detection reagent used: m-IgGλ BP-HRP: sc-516147.



PSP94 (A-8): sc-390661. Western blot analysis of PSP94 expression in human prostate tissue extract.

## 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.