

PSP94 (G-6): sc-377444

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.

CHROMOSOMAL LOCATION

Genetic locus: Msmb (mouse) mapping to 14 B.

SOURCE

PSP94 (G-6) is a mouse monoclonal antibody raised against amino acids 1-113 representing full length PSP94 of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PSP94 (G-6) is available conjugated to agarose (sc-377444 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377444 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377444 PE), fluorescein (sc-377444 FITC), Alexa Fluor® 488 (sc-377444 AF488), Alexa Fluor® 546 (sc-377444 AF546), Alexa Fluor® 594 (sc-377444 AF594) or Alexa Fluor® 647 (sc-377444 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377444 AF680) or Alexa Fluor® 790 (sc-377444 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

PSP94 (G-6) is recommended for detection of PSP94 of mouse and rat 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 (m): sc-76281, PSP94 shRNA Plasmid (m): sc-76281-SH and PSP94 shRNA (m) Lentiviral Particles: sc-76281-V.

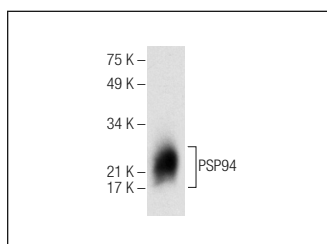
Molecular Weight of PSP94: 11 kDa.

Positive Controls: rat prostate extract: sc-364805.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PSP94 (G-6): sc-377444. Western blot analysis of PSP94 expression in rat 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA