**BACKGROUND**

Prostate cancer is the ninth most common cancer in the world, and is the number one non-skin cancer that affects men in the United States. Prostate cancer occurs when cells of the prostate mutate and begin to multiply inappropriately. These cells may metastasize from the prostate to other parts of the body, especially the bones, lymph nodes, rectum and bladder. Prostate tumors have unique proteins that may be useful as cancer markers during diagnosis and treatment. A few of the proteins that are specific for prostate tumors include α-methylacyl-CoA racemase (AMACR), the hypermethylated form of retinoic acid receptor β2 (RARβ2) and prostate specific antigen (PSA), which is the most reliable clinical tool for diagnosing and monitoring prostate cancer. Prostate mucin antigen (Pma) is expressed only in prostate carcinomas and cow submaxillary glands. A high molecular weight protein, Pma contains an O-linked oligosaccharide containing N-acetyl galactosamine. It is a glycoprotein with mucin-like features that may prove to be a useful tumor marker.

**REFERENCES**


**SOURCE**

Pma (YPMA-1) is a mouse monoclonal antibody raised against Pma of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Pma (YPMA-1) is recommended for detection of Pma of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with fetal or benign prostate specimens, non-prostate carcinomas and normal human tissue.

Molecular Weight of Pma: greater than 400 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (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.