

Product Specification Sheet

**Prostate specific antigen (PSA) Antibodies and Protein Control**

Cat. # PSA18-M	Mouse Anti-human prostate specific antigen (PSA) IgG, aff pure	<b>SIZE:</b> 100 ug
Cat. # PSA11-C	Human prostate specific antigen (PSA) protein control for Western Blot	<b>SIZE:</b> 100 ul

Human Prostate-specific antigen (PSA) is a single chain glycoprotein with Mol. Wt. Of 34 kDa containing 7% carbohydrates. It is uniquely associated with prostate tissue and presents in both normal and cancerous prostatic tissue, prostatic fluid and seminal plasma (1). PSA is not present in any of the normal tissue obtained from men nor is it produced by cancers of the lung, colon, rectum, stomach, breast, pancreas or thyroid (2).

Elevated serum PSA concentration have been reported in patient with prostate cancer, benign prostatic hypertrophy, or inflammatory tissues, but not in apparently healthy women with cancer (3). PSA levels correlate with the stage of disease and response to treatment in-patients with prostatic cancer (4-7). Therefore sequential measurements of PSA concentration can be an important tool in monitoring patients with prostatic cancer and in determining the potential and effectiveness of surgery of other therapies.

**Source of Antigen and Antibodies**

<b>Antigen</b>	Purified human PSA protein
<b>Antibody host/type</b>	Mouse, monoclonal affinity purified IgG1, <b>Cat # PSA18-M</b>
<b>Secondary Ab</b>	Cat # 40320, rabbit anti-mouse IgG-HRP (AP, biotin, FITC conjugates also available) or Goat Anti-mouse IgG1-HRP (#40126)
<b>Negative Control Ab</b>	Non-immune mouse IgG1 (Cat # 20008-1) isotype control be used as -ve control for ELISA, WB, IHC etc.

Human PSA protein (~34 kda) was purified from human fluids. All human derived material has been tested negative for HIV, HCV, and HbSAg. Nevertheless, all precautions should be taken and samples be treated as potentially hazardous. For Western blot +ve control (Cat # **PSA11-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **PSA11-C** for good visibility with antibody Cat # **PSA11-A** or **PSA18-M** or other antibodies. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **PSA11-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

**Form & Storage**

Aff Pure (purified)  
100 ug/vial  
solution, PBS pH 7.5, 0.05%azide  
lyophilized in PBS pH 7.5, 0.05% azide  
Reconstitute powder in 100 ul water

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting** (1-2 ug/ml using ECL.

**ELISA** (0.1-1 ug/ml as detecting antibody. Suitable as capture antibody.

**Histochemistry:** not tested. We recommend the use of 2-10 ug/ml of antibody in paraformaldehyde-fixed, paraffin embedded sections.

**Specificity & Cross-reactivity**

PSA-M reacts with human PSA. No crossreactivity is observed with albumin, AFP, CEA, CA125, CA15-3, and CA19-9. Purified recombinant human PSA protein control for Western (#PSA11-C) or ELISA (#PSA15-N-100) is available for QC of antibodies.

**General References:** Bell GI (1980) Nature 284, 26-32; Melloul D (2002) Diabetologia 45, 309-326; Steiner DF (1967) PNAS 57, 473-480;

\*This product is for In vitro research use only.

**Related material available from ADI**

Purified PSA proteins, Antibodies (poly and Mono), PSA/ACT

PSA and Free PSA ELISA kits

<http://4adi.com/commerce/cc02703-serum-proteins.htm>

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