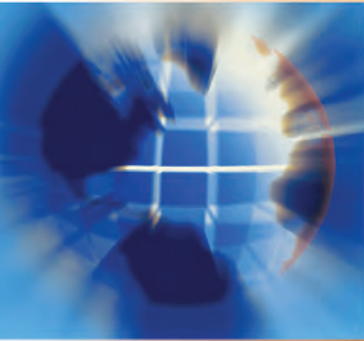


# MONOCLONAL ANTIBODIES TO PROSTATE SPECIFIC ANTIGEN (PSA)



PSA is a protein produced by the cells of the prostate gland. Normally PSA is involved in the dissolution of the seminal fluid coagulum and it plays a role in fertility. Highest amounts are found in the seminal fluid but low levels do enter the blood stream of a normal male.

PSA levels are found to be useful in screening men for prostate cancer. It is often elevated in the presence of prostate cancer, but is also elevated in disorders such as benign prostatic hyperplasia (BPH) and acute bacterial prostatitis.

## Monoclonal Antibodies (MAbs) to PSA:

PSA is also known as kallikrein III, seminin, semenogelase, gamma-seminoprotein and P-30 antigen. It is a 33 kDA protein consisting of a single-chain glycoprotein of 237 amino acid residues, 4 carbohydrate side chains and multiple disulfide bonds.

The U.S. Food and Drug Administration (FDA) has approved PSA tests for annual screening of prostate cancer in men of age 50 and older. The most valuable measurement of PSA is its change over time rather than the actual serum level.

Assays for total PSA (tPSA) are based on the detection of two major forms:

- Free or uncomplexed (fPSA)
- Complexed, the dominant form of PSA bond to  $\alpha$ 1-antichymotrypsin (PSA-ACT)

Meridian Life Science, Inc. is introducing a new group of Monoclonal Antibodies (MAbs) to PSA that are specific for tPSA. These MAbs were characterized in ELISA to offer you antibody pairs that detect either tPSA or fPSA.

Other applications have not been tested but use in such assays should not necessarily be excluded.

## General Specifications:

**Description:** MAb to PSA, Total

**Specificity:** In sandwich ELISA, reacts with total PSA (fPSA and PSA-ACT)

**Host Animal:** Mouse

**Source:** Ascites

**Immunogen:** Purified PSA

**Format:** Purified Liquid

**Purification:**  $\geq$  90% pure (SDS-PAGE), Protein A Chromatography, 0.2  $\mu$ m filtered

**Buffer:** PBS, pH 7.4  $\pm$  0.2

**Preservative:** 0.05% Sodium azide

**Storage:** Upon receipt, aliquot and store at -20°C

For more information including pricing and availability; please contact us at [info1@meridianlifescience.com](mailto:info1@meridianlifescience.com)

# MONOCLONAL ANTIBODIES TO PROSTATE SPECIFIC ANTIGEN (PSA) PROTOCOL AND PAIRING INFORMATION

## Pairing Information was Developed by Testing the MABs in Sandwich ELISA:

- Capture MABs (use multiple titers to determine an optimal concentration) – coat at 100uL/well overnight at 2 – 8°C
- Wash plate three times
- Block for 2 hours at Room Temperature (RT)
- Wash plate three times
- Add antigen, 50uL/well (use multiple titers to determine an optimal concentration) - 2 hours at RT
- Detection MAB – add 50uL/well MAB-HRP – 1 hour at RT
- Wash plate three times
- Add 100uL/well TMB for 15 minutes at RT
- Stop reaction with 50uL 3N H<sub>2</sub>SO<sub>4</sub>
- Read at 450nm

Each laboratory should determine an optimum working titer for use in its particular application

### Quality and Commitment:

- FDA registered facility
- QSR, Quality System Regulation Documentation
- Committed to total customer satisfaction

## Suggested Pairs for Immunoassay

Detection of Total PSA	
Capture	Detection
M66276M	M66280M
M66276M	M86506M
M66280M	M66276M
M66278M	M66280M
M66280M	M66278M
M66279M	M66280M
M66280M	M66279M
M66279M	M86506M
M66280M	M66281M
M66280M	M86506M
M66281M	M66280M

Detection of Free PSA	
Capture	Detection
M66278M	M86806M
M66280M	M86806M
M66281M	M86806M

For Research or Further Manufacturing Use Only.  
Not for Use in Diagnostic Procedures.

ISO 9001:2008 Certified and EC1774/2002 Approved Facility.

ME-PSA 01/04/11

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