

Anti-PSA Antibody (1A7D4)

CATALOG NO:	A1349-1000
AMOUNT:	1 mg
ALTRERNAME NAMES:	Gamma-seminoprotein, Semin, Kallikrein-3, P-30 antigen, Semenogelase, APS
IMMUNOGEN:	Human total PSA purified from seminal plasma.
CLONALITY:	Monoclonal
CLONE:	1A7D4
HOST/ISOTYPE:	Mouse IgG1, κ
PURIFICATION:	Protein A purification
FORM:	Liquid
CONCENTRATION:	0.5 mg/ml
FORMULATION:	In PBS buffer, pH 7.4, containing 0.02% sodium azide
STORAGE CONDITIONS:	For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.
SPECIFICITY:	PSA monoclonal antibodies (5B10D4, 8A9B8, 1G9G8, 4A5D10 and 1A7D4) recognize total PSA, free PSA and ACT- PSA Complex (Prostate Specific Antigen / a-1 Antichymotrypsin Complex).
DESCRIPTION:	Prostate-specific antigen (PSA) is also known as kallikrein III, seminin, semenogelase, γ -seminoprotein and P-30 antigen. It is a serine protease enzyme produced by the cells of the prostate gland. Most of PSA in the blood which is bound to serum proteins is known as total PSA, while a small amount which is not protein bound to is called free PSA. PSA liquifies the semen in the seminal coagulum and allows sperm to swim freely. PSA is often elevated in the presence of prostate cancer and in other prostate disorders. A blood test to measure PSA is considered to be the most effective test currently available for the early detection of prostate cancer. Furthermore, rising levels of PSA over time are associated with both localized and metastatic prostate cancer (CaP). Human PSA monoclonal antibody is produced from the hybridoma resulting from fusion of SP2/0-Ag14 myeloma and B-lymphocytes obtained from mouse immunized with human total PSA purified from seminal plasma.
APPLICATION:	These antibodies are perfect choice for in vitro diagnostic assay development. They are prepared for non-clinical research use only. The recommended pairs are based on our laboratory results.

	Capture				
Detection	A1345 (5B10D4)	A1346 (8A9B8)	A1347 (1G9G8)	A1348 (4A5D10)	A1349 (1A7D4)
A1345 (5B10D4)		+++	++	++	+++
A1346 (8A9B8)	-		-	+++	-
A1347 (1G9G8)	-	+++		-	++
A1348 (4A5D10)	-	-	-		-
A1349 (1A7D4)	++	-	++	++	

The above Data was achieved by Sandwich ELISA. '+' means reaction and '-' means no reaction. The number of '+' represents reaction intensity.

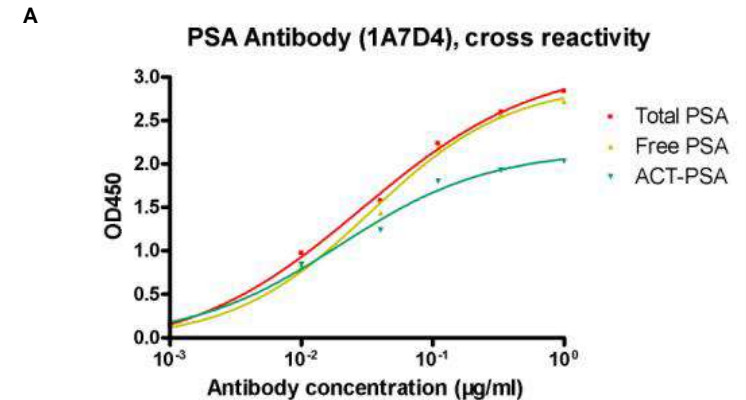
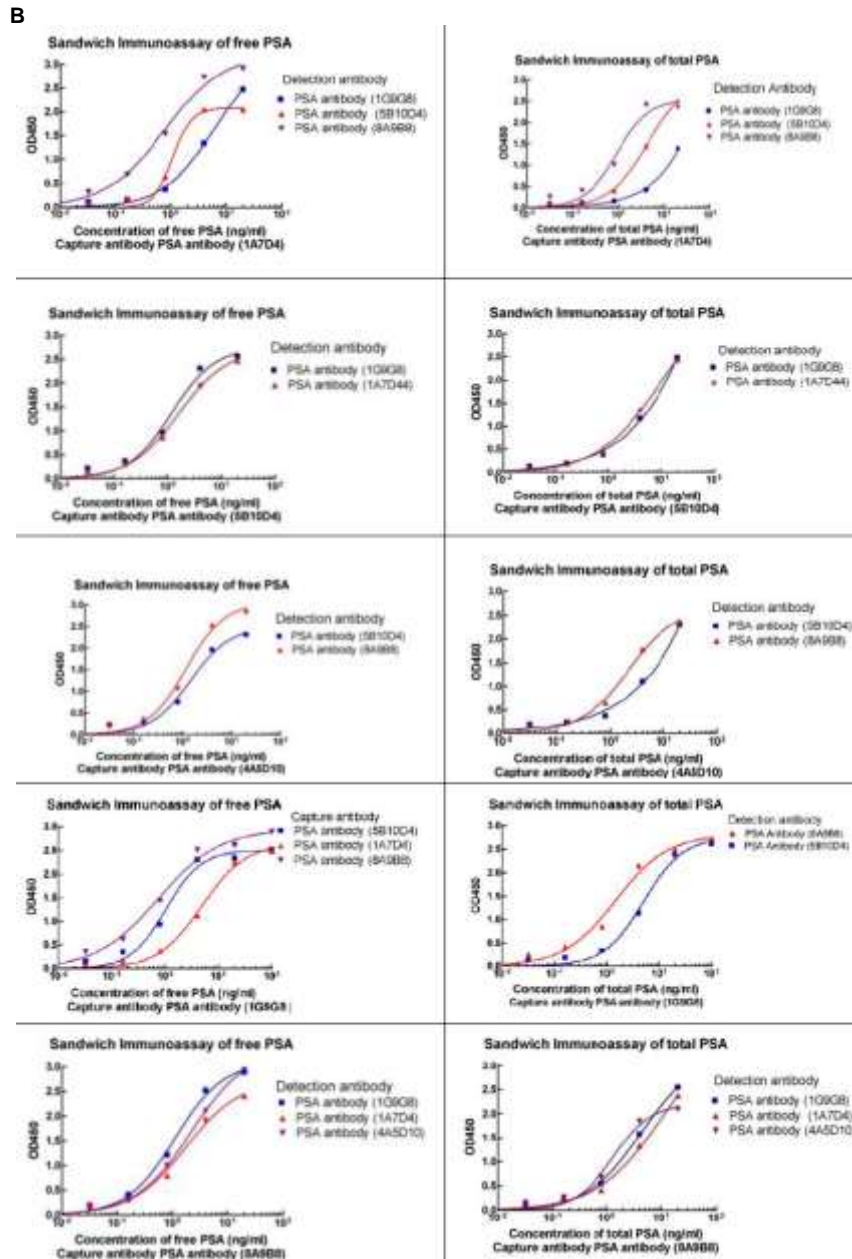


Fig. A. Cross-reactivity of PSA antibody (1A7D4) by Indirect ELISA

General conditions for Indirect ELISA:

1. Microplate was coated with total PSA, free PSA, ACT-PSA respectively, followed by 3 washing cycles.
2. Incubation with mouse anti-PSA followed by 3 washing cycles.
3. Incubation with goat anti-mouse IgG conjugated to peroxidase, followed by 3 washing cycles.
4. Bound peroxidase activity was determined by Colorimetric detection.





General conditions for sandwich ELISA:

1. Microplate was coated with a capture antibody against PSA, followed by 3 washing cycles.
2. Incubation with free PSA or total PSA followed by 3 washing cycles.
3. Incubation with peroxidase conjugated detection antibody against PSA, followed by 3 washing cycles.
4. Bound peroxidase activity was determined by Colorimetric detection.

RELATED PRODUCTS:

- Prostate Specific Antigen (PSA) Activity Assay Kit (Fluorometric) (**Cat. No. K962**)
- Prostate Specific Antigen (Free, human) ELISA Kit (**Cat. No. K7432**)
- Prostate Specific Antigen (Total, human) ELISA Kit (**Cat. No. K7431**)

Fig. B. Antibody pairs analysis of PSA monoclonal antibodies by Sandwich ELISA

FOR RESEARCH USE ONLY! Not to be used on humans.

