

PROSTATE SPECIFIC ANTIGEN (PSA AND FREE PSA)

Specificity	PSA & Free PSA	RECOMMENDED PAIRS: PSA: MAB291P & MAB292P FPSA: MAB296P & MAB292P
Host Species	Mouse	

Application	Sandwich ELISA and potentially other immunoassay applications
Target Marker	Prostate cancer and the related secondary metastatic tumours are a leading cause of death in men worldwide. The testing of the tumour marker, prostate-specific antigen (PSA), has been credited with significantly reducing the number of prostate cancer-related deaths since its widespread adoption. Combining the testing of total PSA with free prostate specific antigen (FPSA) is helpful in improving the differentiation of prostate cancer and benign prostate hyperplasia.
References	Castro HAS, Iared W, Santos JEM, Solha RS, Shigueoka DC, Ajzen SA. Impact of PSA density of transition zone as a potential parameter in reducing the number of unnecessary prostate biopsies in patients with PSA levels between 2.6 and 10.0 ng/mL. Int Braz J Urol. 2018;44(4):709-716.

WHY CHOOSE BBI'S ANTIBODIES?

Maximise your chances of developing successful PSA assays:

- + Antibody clones used as matched pairs in commercialised bioMérieux assays – proven performance
- + Manufactured in-house at BBI for better security of supply
- + cGMP production and quality management for increased batch-to-batch consistency
- + Suite of reagents for your PSA assay needs

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Characterisation

Total PSA Colourimetric Sandwich Assay
MAB291P Capture with MAB292P Detector

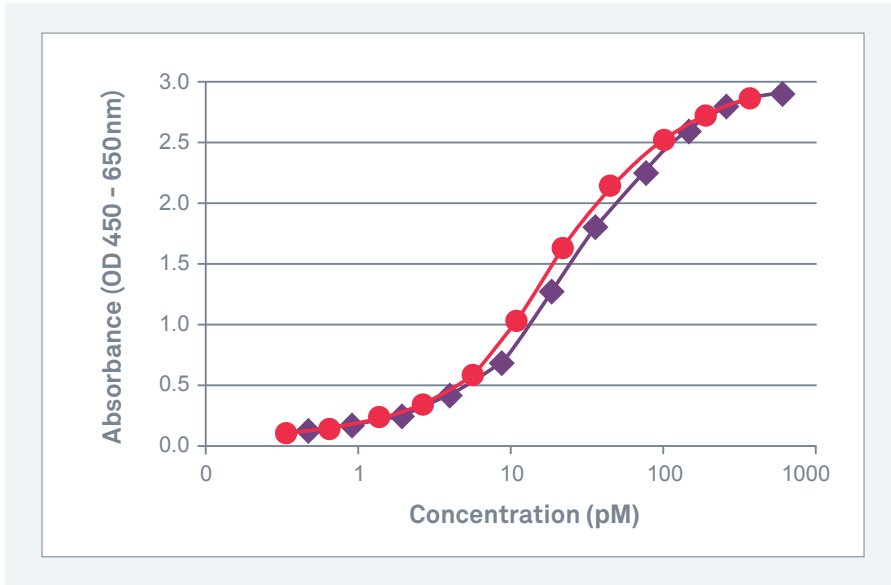


Figure 1: A colourimetric sandwich ELISA demonstrating the sensitive detection of Total PSA: both free and in complex with alpha-1 antichymotrypsin after dilution in PBS 0.5% BSA. Data generated using MAB291P (clone P12C11G5) as capture and biotinylated MAB292P (clone P11E5G5) as detector.

- Human PSA (P117-7)
- ◆ Human PSA Alpha-1-Antichymotrypsin Complex (P192-3)

Free PSA Colourimetric Sandwich Assay
MAB296P Capture with MAB292P Detector

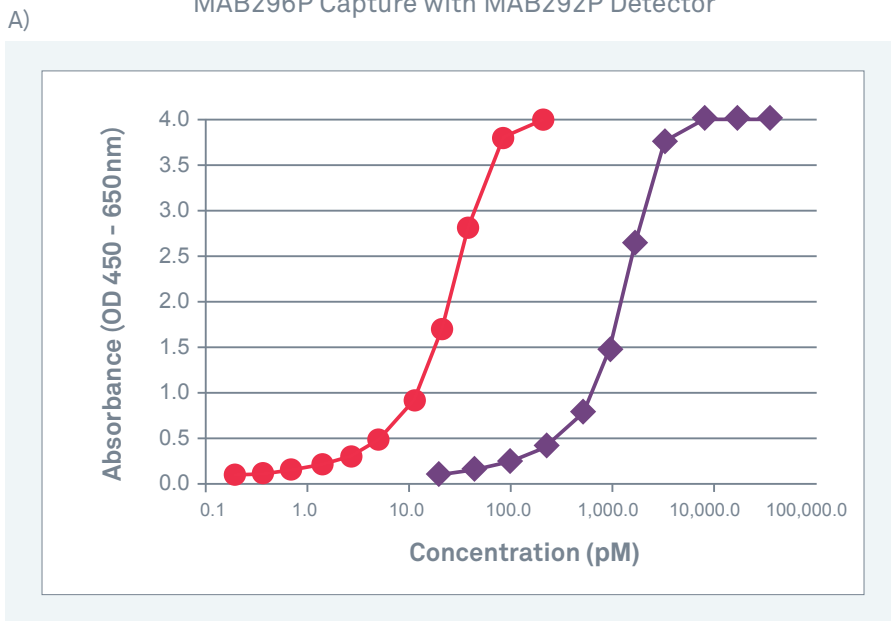


Figure 2: Free PSA colourimetric sandwich assay. A) Data generated using MAB296P (clone P6C8H6) as capture antibody and MAB292P (clone P11E5G5) as biotinylated detector antibody. The free PSA antibody has a demonstrably lower affinity for the PSA alpha-1 antichymotrypsin complex as compared to free PSA making it ideal for use in an assay for free PSA. B) Table showing the free PSA and complexed PSA concentrations at midpoint of the standard curve.

- Free PSA (P117-7)
- ◆ Human PSA Alpha-1-Antichymotrypsin Complex (P192-3)

B)

PSA Antigen	Concentration in pM at midpoint of standard curve	% Reactivity
PSA-ACT (P192-3)	1094	2.5
PSA (P117-7)	28	100

Use in assays

Standard curve from optimised fluorescence immunoassay using P11E5G5 as the detector and P12C11G5 as the capture antibody*

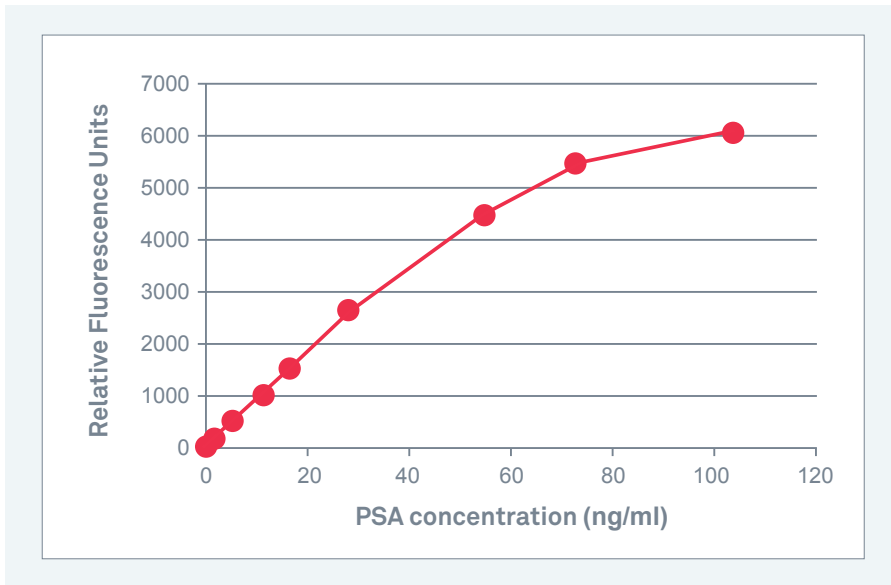


Figure 3: Standard curve from optimised assay format (Fluorescence Immunoassays) using PSA antibody clones as capture and detector with \ clinically relevant range of quantitative detection.

Antibody clones (P12C11G5, P11E5G5) used in commercialised bioMérieux immunoassays**

Standard curve from optimised fluorescence immunoassay using P11E5G5 as the detector and P6C8H6 as the capture antibody*

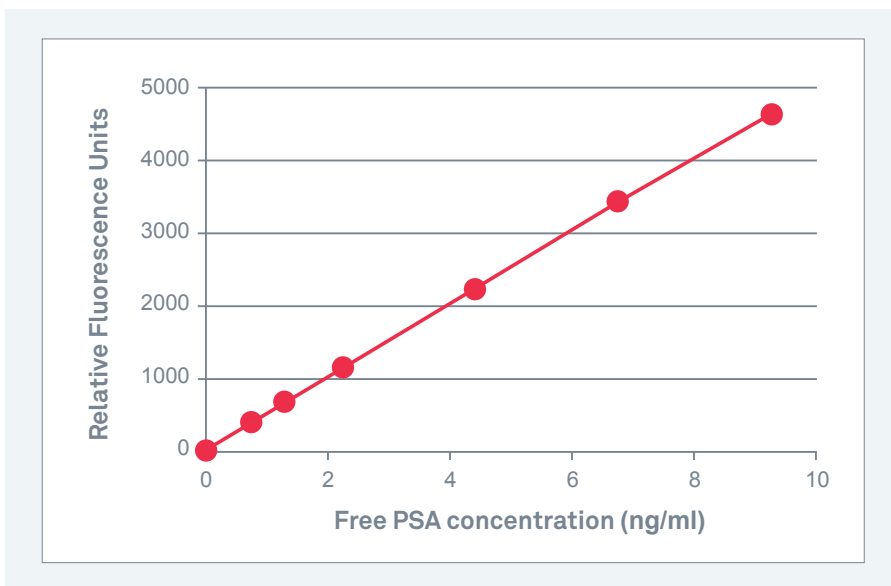


Figure 4: Standard curve from optimised assay format (Fluorescence Immunoassays) using Free PSA antibody clone as capture and PSA clone as detector with clinically relevant range of quantitative detection. Can be used to detect PSA-ACT and Free PSA in an equimolar fashion in an optimised assay format.

Antibody clones (P6C8H6, P11E5G5) used in commercialised bioMérieux immunoassays**

* data not generated by BBI

** VIDAS® and/or VIKIA® and/or BIONEXIA®

Pack sizes

1 mg, bulk amounts available on request.

ORDERING DETAILS - USE THE FOLLOWING CODES WHEN ORDERING

Product	Code	Description
PSA Monoclonal Antibody	MAB291P	Detects PSA as either capture or detector antibody, when paired with MAB292P in sandwich ELISA
PSA Monoclonal Antibody	MAB292P	Detects PSA as either capture or detector antibody, when paired with MAB291P in sandwich ELISA. Detector antibody for FPSA when paired with MAB296P in sandwich ELISA
Free PSA Monoclonal Antibody	MAB296P	Used as capture for the specific recognition of Free PSA in sandwich ELISA. Paired as capture with MAB292P as detector

Related products

PSA	P117-7	Pure liquid PSA formulated in PBS
PSA	P117-8	Part-pure liquid PSA formulated in PBS
PSA ACT Complex	P192-3	Pure liquid frozen PSA-Alpha 1 antichymotrypsin complex
PSA ACT Complex	P192-9	Part-pure liquid frozen PSA-Alpha 1 antichymotrypsin complex, < 5% free PSA

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