Total PSA (human) ELISA kit

Highly sensitive Total PSA ELISA kit enabling detection of Total PSA in human serum, plasma, urine, and tissue culture media samples in just 2.5 hours.

The Total PSA (human) ELISA kit is a colorimetric immunometric immunoassay kit with results in 2.5 hours.

Prostate-specific antigen (PSA), also known as γ-seminoprotein or kallikrein-3 (KLK3), is a kallikrein-like protease produced by the epithelial cells in the prostate gland, the lining of the urethra, and the bulbourethral gland. It is a single-chain glycoprotein with a molecular weight of about 30-33kDa in human seminal plasma and it functions normally in the liquefaction of seminal coagulum. Under healthy condition, very little PSA is secreted in the blood. PSA exists in serum in multiple forms. The proteolytic activity of PSA in blood is inhibited by irreversible formation of complexes with proteinase inhibitors such as α1-antichymotrypsin (PSA-ACT complex), α2-macroglobulin (not detected by immunoassays) and other acute phase proteins. A small amount of PSA is not protein bound and is called 'free PSA", which is also proteolytically inactive. Increases in glandular size and tissue damage caused by benign prostatic hypertrophy, prostatitis, or prostate cancer may increase circulating PSA levels. Monitoring the total PSA level in male blood has been used as an indicator for abnormal prostate function in the past decades. This assay provides an equal molar detection on different forms of PSA in human matrices, which improves the accuracy and sensitivity of the measurement on the total PSA levels.

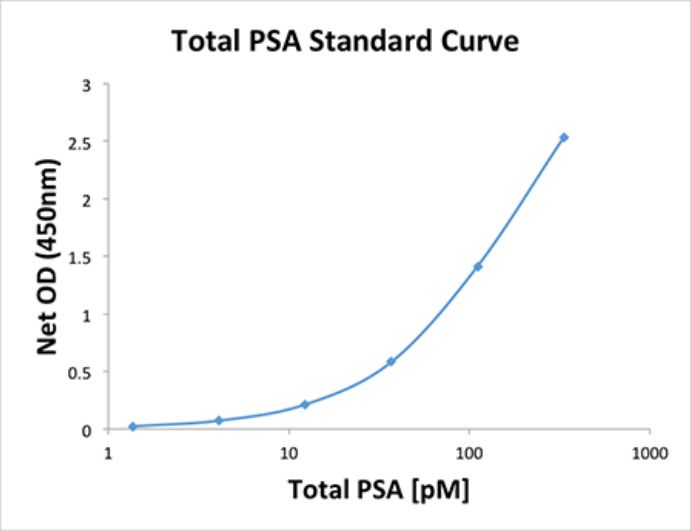
- Highly-sensitive measurement of Total PSA, detecting as little as 0.287pM (or 0.024ng/ml) with negligible cross reactivity with similar proteins (KLK2, ACT)
- Compatible with various sample types (plasma, serum, urine, tissue culture media)
- High throughput format with results in 2.5 hours for up to 40 samples in duplicate
- Fully quantitative results that surpass semi-quantitative Western blot analysis

Citations: 1 View Online »

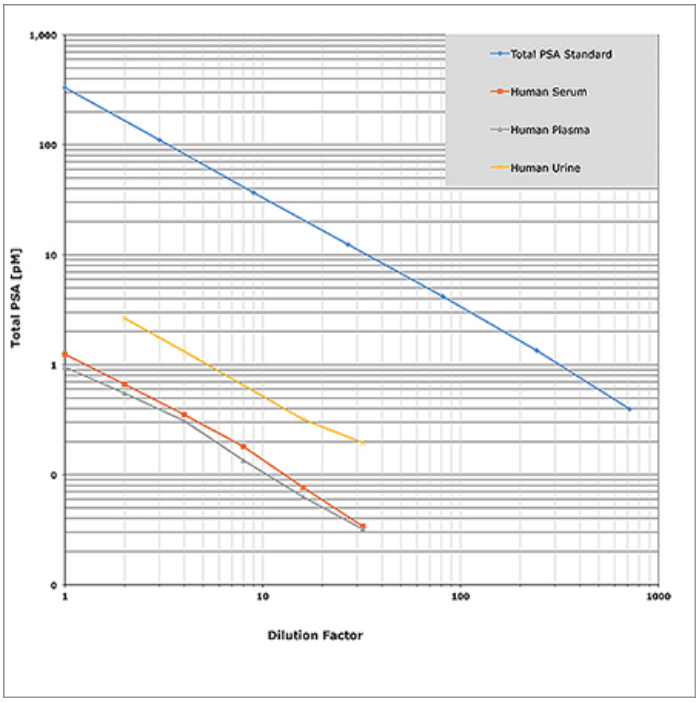
Ordering Information Order Online »

ENZ-KIT146-0001	96 wells

Manuals, SDS & CofA View Online »


Total PSA Standard Curve
Net OD (450nm)
3
2.5
2
1.5
1
0.5
0
1
10
100
1000
Total PSA [pM]


Enzo
www.enzolifesciences.com


Total PSA Standard
Human Serum
Human Plasma
Human Urine
Total PSA [pM]
1,000
100
10
1
0
0
1
10
100
1000
Dilution Factor

Handling & Storage

Long Term Storage +4°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	Prostate specific antigen, Kallikrein-3
Application	Colorimetric detection, ELISA
Application Notes	For the quantitative determination of Total PSA in human serum, plasma, urine and tissue culture media.
Assay Time	2.5 hours
Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Contents	Microtiter plate, Assay Buffer 13, Standard, Wash Buffer Concentrate, Antibody, Antibody Diluent, Conjugate, Substrate, and Stop Solution
Crossreactivity	Minimal cross-reactivity to similar family molecules (KLK2, ACT).
Sensitivity	0.287pM or 0.024ng/ml (333-1.37pM or 28-0.12ng/ml)
Species Reactivity	Human
UniProt ID	P07288
Wavelength	450 nm

Last modified: May 29, 2024

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