



Human prostate specific antigen,PSA ELISA Kit

Product Code	CSB-E04768h
Abbreviation	PSA
Protein Biological Process 1	Tumor marker
Target Name	kallikrein-related peptidase 3
Uniprot No.	P07288
Alias	APS, KLK2A1, PSA, hK3, P-30 antigen gamma-seminoprotein prostate specific antigen semenogelase seminin
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cancer
Gene Names	KLK3
Tag Info	quantitative
Protein Description	Sandwich

Description

The human PSA ELISA Kit is intended to measure human PSA in serum, plasma, or tissue homogenates. This assay uses the bi-antibody sandwich technique and enzyme-substrate chromogenic reaction to quantify human PSA concentration. The intensity of the colored product is positively proportional to the concentration of PSA present in the sample. This human PSA ELISA kit has high specificity and excellent sensitivity.

PSA is a serine protease with chymotrypsin-like enzymatic activity. It is expressed predominantly in the prostate and a subset of proximal renal tubules. It mainly functions to degrade the gel-forming proteins semenogelins I and II in semen after ejaculation. This process causes the seminal clot to liquefy and motile sperm to be released, allowing the spermatozoa to pass through the female reproductive canal. PSA level in semen has been shown to correlate with sperm motility, suggesting that PSA level/activity can affect fertility. PSA is a



credentialed imaging and therapy (theranostic) target for the detection and treatment of prostate cancer.

Target Details

Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. Its protein product is a protease present in seminal plasma. It is thought to function normally in the liquefaction of seminal coagulum, presumably by hydrolysis of the high molecular mass seminal vesicle protein. Serum level of this protein, called PSA in the clinical setting, is useful in the diagnosis and monitoring of prostatic carcinoma. Alternate splicing of this gene generates several transcript variants encoding different isoforms.

Product Precision

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean(ng/ml)	7.453	8.138	8.095	7.820	8.312	8.023
SD	0.030	0.041	0.039	0.041	0.048	0.049
CV(%)	6.274	7.832	7.614	8.291	9.075	9.645

Linearity

Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-E04768h.pdf",
    "filename": "MSDS"
  }
}
```