

Datasheet for ABIN1889414
PRSS8 ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	PRSS8
Binding Specificity:	AA 33-319
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	1.56-100 ng/mL
Minimum Detection Limit:	1.56 ng/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Prostatin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: CHO Immunogen sequence: A33-G319
Specificity:	Expression system for standard: CHO Immunogen sequence: A33-G319
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<50pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	PRSS8
Alternative Name:	PRSS8 (PRSS8 Products)
Background:	<p>Protein Function: Possesses a trypsin-like cleavage specificity with a preference for poly-basic substrates. Stimulates epithelial sodium channel (ENaC) activity through activating cleavage of the gamma subunits (SCNN1G).</p> <p>Background: Prostaticin is a protein that in humans is encoded by the PRSS8 gene. It is a single-copy gene and mapped to 16p11.2. Prostaticin is likely to be the more physiologically relevant protease. This gene encodes a trypsinogen, which is a member of the trypsin family of serine proteases. Coexpression of Prostaticin with either Xenopus or rat ENaC in Xenopus oocytes resulted in a 60 % to 80 % increase in amiloride-sensitive sodium currents, and that the addition of aprotinin, a serine protease inhibitor, completely prevented this activation. This enzyme is highly expressed in prostate epithelia and is one of several proteolytic enzymes found in seminal fluid. The proprotein is cleaved to produce a light chain and a heavy chain which are associated by a disulfide bond. It is active on peptide linkages involving the carboxyl group of lysine or arginine.</p> <p>Synonyms: Prostaticin,3.4.21.-,Channel-activating protease 1,CAP1,Serine protease 8,Prostaticin light chain,Prostaticin heavy chain,PRSS8,</p> <p>Full Gene Name: Prostaticin</p> <p>Cellular Localisation: Prostaticin: Cell membrane, Single-pass membrane protein.</p>
Gene ID:	5652
UniProt:	Q16651

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the peptidase S1 family.

Application Details

Tissue Specificity: Found in prostate, liver, salivary gland, kidney, lung, pancreas, colon, bronchus and renal proximal tubular cells. In the prostate gland it may be synthesized in epithelial cells, secreted into the ducts, and excreted into the seminal fluid.

Plate: Pre-coated

Protocol: human Prostatin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Prostatin has been precoated onto 96-well plates. Standards(CHO, A33-G319) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Prostatin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Prostatin amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 100 ng/mL, 50 ng/mL, 25 ng/mL, 12.5 ng/mL, 6.25 ng/mL, 3.12 ng/mL, 1.56 ng/mL human Prostatin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Prostatin standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 16, Standard deviation: 0.67, CV(%): 4.2
- Sample 2: n=16, Mean(ng/ml): 42, Standard deviation: 1.51, CV(%): 3.6
- Sample 3: n=16, Mean(ng/ml): 71, Standard deviation: 2.71, CV(%): 3.8,
- Sample 1: n=24, Mean(ng/ml): 20, Standard deviation: 1.46, CV(%): 7.3
- Sample 2: n=24, Mean(ng/ml): 46, Standard deviation: 2.62, CV(%): 5.7
- Sample 3: n=24, Mean(ng/ml): 75, Standard deviation: 3.68, CV(%): 4.9

Restrictions: For Research Use only

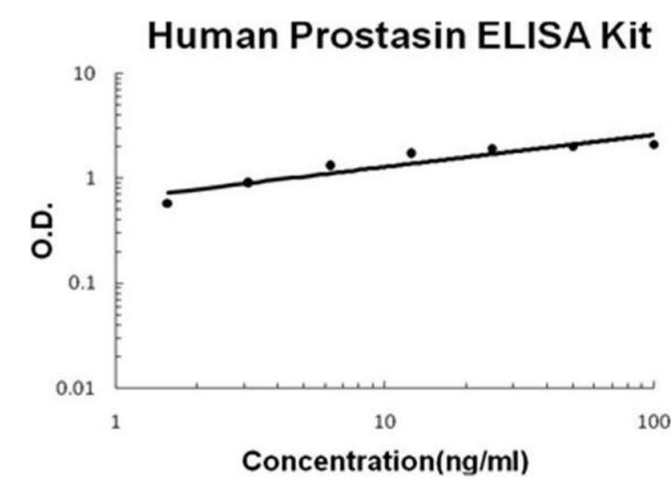
Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months



ELISA

Image 1. Human Prostasin PicoKine ELISA Kit standard curve