Datasheet for ABIN1889415

PRSS8 ELISA Kit

1 Image

Go to Product page

Overview

Quantity:	96 tests
Target:	PRSS8
Binding Specificity:	AA 30-289
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	0.78-50 ng/mL
Minimum Detection Limit:	0.78 ng/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Prostasin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: A30-Q289
Specificity:	Expression system for standard: NSO Immunogen sequence: A30-Q289
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:	Protein Function: Possesses a trypsin-like cleavage specificity with a preference for poly-basic substrates (By similarity). Stimulates epithelial sodium channel (ENaC) activity through activating cleavage of the gamma subunits (SCNN1G). . Background: Prostasin is a protein that in humans is encoded by the PRSS8 gene. It is a single-copy gene and mapped to 16p11.2. Prostasin 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 Prostasin 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. Synonyms: Prostasin,3.4.21.-,Channel-activating protease 1,CAP1,Serine protease 8,Prostasin light chain,Prostasin heavy chain,Prss8,Cap1, Full Gene Name: Prostasin Cellular Localisation: Cell membrane, Single-pass membrane protein.
Gene ID:	76560
UniProt:	Q9ESD1

Application Details

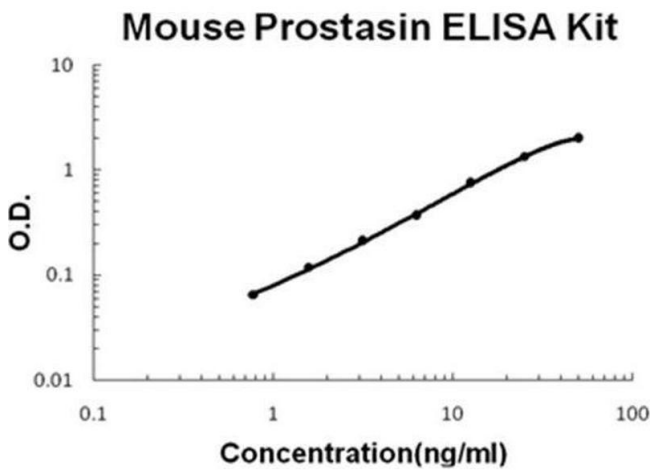
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the peptidase S1 family.

Application Details

Plate:	Pre-coated
Protocol:	mouse Prostasin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Prostasin has been precoated onto 96-well plates. Standards(NSO, A30-Q289) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Prostasin 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 mouse Prostasin amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 50 ng/mL, 25 ng/mL, 12.5 ng/mL, 6.25 ng/mL, 3.12 ng/mL, 1.56 ng/mL, 0.78 ng/mL mouse Prostasin 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 mouse cell culture supernates, serum, plasma(heparin, EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each mouse Prostasin standard solution and each sample is measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 1.45, Standard deviation: 0.08, CV(%): 5.6 • Sample 2: n=16, Mean(ng/ml): 25.2, Standard deviation: 1.06, CV(%): 4.2 • Sample 3: n=16, Mean(ng/ml): 38.1, Standard deviation: 2.02, CV(%): 5.3, • Sample 1: n=24, Mean(ng/ml): 2.64, Standard deviation: 0.19, CV(%): 7.2 • Sample 2: n=24, Mean(ng/ml): 18.5, Standard deviation: 1.18, CV(%): 6.4 • Sample 3: n=24, Mean(ng/ml): 40.7, Standard deviation: 3.5, CV(%): 8.6
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. Mouse Prostasin PicoKine ELISA Kit standard curve

