Datasheet for ABIN921120

Kallikrein 1 ELISA Kit

Go to Product page

1 Image

Overview

Quantity:	96 tests
Target:	Kallikrein 1 (KLK1)
Binding Specificity:	AA 25-262
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human KLK1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Cell Lysate, Tissue Homogenate, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: I25-S262
Specificity:	Expression system for standard: NSO Immunogen sequence: I25-S262

Product Details

Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/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:	Kallikrein 1 (KLK1)
Alternative Name:	KLK1 (KLK1 Products)
Background:	Protein Function: Glandular kallikreins cleave Met-Lys and Arg-Ser bonds in kininogen to release Lys-bradykinin. Background: Kallikrein-1, also known as tissue kallikrein, is a protein that in humans is encoded by the KLK1 gene. This serine protease generates Lys-bradykinin by specific proteolysis of kininogen-1. KLK1 is a member of the peptidase S1 family. Its gene is mapped to 19q13.3. In all, it has got 262-amino acids which contain a putative signal peptide, followed by a short activating peptide and the protease domain. The protein is mainly found in kidney, pancreas, and salivary gland, showing a unique pattern of tissue-specific expression relative to other members of the family. KLK1 is implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. Synonyms: Kallikrein-1,3.4.21.35,Kidney/pancreas/salivary gland kallikrein,Tissue kallikrein,KLK1, Full Gene Name: Kallikrein-1
Gene ID:	3816
UniProt:	P06870
Pathways:	Complement System

Application Details

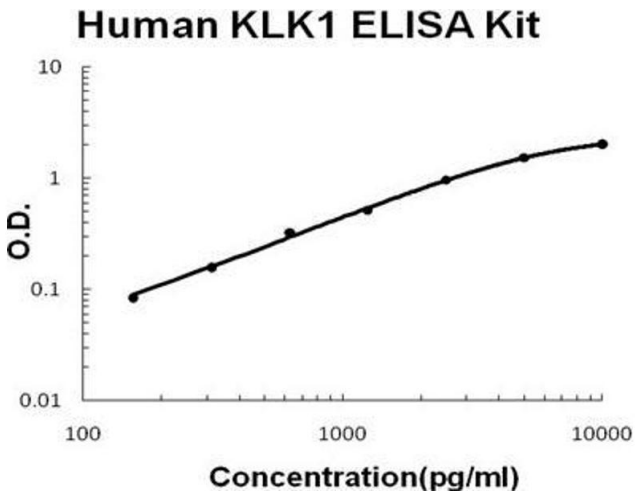
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the peptidase S1 family. Kallikrein subfamily. Tissue Specificity: Isoform 2 is expressed in pancreas, salivary glands, kidney, colon, prostate

Application Details

	gland, testis, spleen and the colon adenocarcinoma cell line T84. .
Plate:	Pre-coated
Protocol:	human KLK1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for KLK1 has been precoated onto 96-well plates. Standards(NSO, I25-S262) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for KLK1 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 KLK1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human KLK1 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, cell lysates, tissue homogenates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human KLK1 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 1468, Standard deviation: 67.53, CV(%): 4.6 • Sample 2: n=16, Mean(pg/ml): 3882, Standard deviation: 260.1, CV(%): 6.7 • Sample 3: n=16, Mean(pg/ml): 6352, Standard deviation: 349.4, CV(%): 5.5, • Sample 1: n=24, Mean(pg/ml): 1625, Standard deviation: 95.9, CV(%): 5.9 • Sample 2: n=24, Mean(pg/ml): 4190, Standard deviation: 301.7, CV(%): 7.2 • Sample 3: n=24, Mean(pg/ml): 6526, Standard deviation: 417.7, CV(%): 6.4
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 KLK1 PicoKine ELISA Kit standard curve

