

Datasheet for ABIN1889328 Kallikrein 14 ELISA Kit

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1 Image

Overview

Quantity:	96 tests
Target:	Kallikrein 14 (KLK14)
Binding Specificity:	AA 19-248
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Kallikrein 14
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Cell Lysate, Serum, Plasma (heparin), Plasma (EDTA), Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q19-M248
Specificity:	Expression system for standard: NSO Immunogen sequence: Q19-M248

Product Details

Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<2pg/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 14 (KLK14)
Alternative Name:	KLK14 (KLK14 Products)
Background:	<p>Protein Function: Serine-type endopeptidase with a dual trypsin-like and chymotrypsin-like substrate specificity. May activate/inactivate the proteinase-activated receptors F2R, F2RL1 and F2RL3 and other kallikreins including KLK1, KLK3, KLK5 and KLK11. May function in seminal clot liquefaction through direct cleavage of the semenogelin SEMG1 and SEMG2 and activation of KLK3. May function through desmoglein DSG1 cleavage in epidermal desquamation a process by which the most superficial corneocytes are shed from the skin surface. May be involved in several aspects of tumor progression including growth, invasion and angiogenesis. .</p> <p>Background: Kallikrein-14 is a protein that in humans is encoded by the KLK14 gene. Kallikrein-14 belongs to the kallikrein subgroup of serine proteases, which have diverse physiologic functions in many tissues. Kallikrein-14 gene is identified in the kallikrein gene cluster on chromosome 19q13.4. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers.</p> <p>Kallikrein-14 may activate or inactivate the proteinase-activated receptors F2R, F2RL1 and F2RL3 and other kallikreins including KLK1, KLK3, KLK5 and KLK11.</p> <p>Synonyms: Kallikrein-14,hK14,3.4.21.-,Kallikrein-like protein 6,KLK-L6,KLK14,KLKL6,</p> <p>Full Gene Name: Kallikrein-14</p> <p>Cellular Localisation: Secreted, extracellular space.</p>
Gene ID:	9622
UniProt:	Q9P0G3
Pathways:	Complement System , Regulation of G-Protein Coupled Receptor Protein Signaling

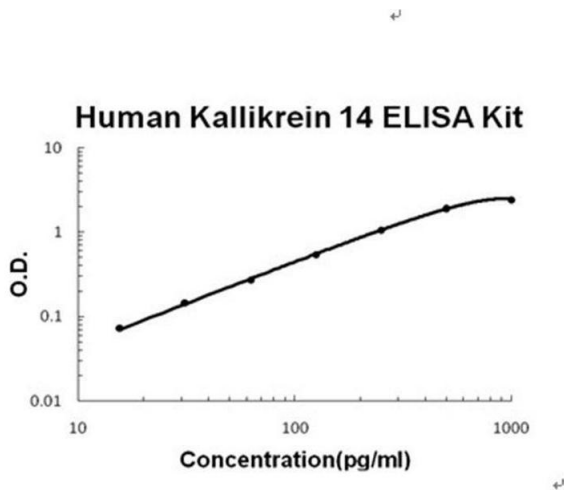
Application Details

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:	<p>Sequence similarities: Belongs to the peptidase S1 family. Kallikrein subfamily.</p> <p>Tissue Specificity: Highly expressed in CNS, bone marrow and fetal liver. Also expressed in breast, thyroid, kidney, colon, pancreas, spleen, prostate, uterus, small intestine, placenta and skeletal muscle. Among 40 tissues tested, the highest expression is detected in skin followed by breast and prostate (at protein level). Expressed in stratum corneum by sweat ducts and sweat glands and detected in sweat (at protein level). .</p>
Plate:	Pre-coated
Protocol:	human Kallikrein 14 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Kallikrein 14 has been precoated onto 96-well plates. Standards(NSO, Q19-M248) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Kallikrein 14 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 Kallikrein 14 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL human Kallikrein 14 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, serum, plasma(heparin, EDTA) or tissue homogenates to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Kallikrein 14 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 124, Standard deviation: 8.31, CV(%): 6.7• Sample 2: n=16, Mean(pg/ml): 364, Standard deviation: 17.5, CV(%): 4.8• Sample 3: n=16, Mean(pg/ml): 613, Standard deviation: 32.5, CV(%): 5.3,• Sample 1: n=24, Mean(pg/ml): 146, Standard deviation: 10.66, CV(%): 7.3• Sample 2: n=24, Mean(pg/ml): 408, Standard deviation: 22.44, CV(%): 5.5• Sample 3: n=24, Mean(pg/ml): 644, Standard deviation: 39.3, CV(%): 6.1
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

Images



ELISA

Image 1. Human Kallikrein 14 PicoKine ELISA Kit standard curve