

Datasheet for ABIN1672807 Kallikrein 5 ELISA Kit

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Overview

Quantity:	96 tests
Target:	Kallikrein 5 (KLK5)
Binding Specificity:	AA 23-293
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	78-5000 pg/mL
Minimum Detection Limit:	78 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human KLK5
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Milk, Saliva
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: V23-S293
Specificity:	Expression system for standard: NSO Immunogen sequence: V23-S293
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

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 5 (KLK5)
Alternative Name:	KLK5 (KLK5 Products)
Background:	<p>Protein Function: May be involved in desquamation.</p> <p>Background: Kallikrein gene 5(KLK5, also known as KLK-L2), located on chromosome 19q13.4, is one of the newly identified members of the kallikrein gene family, which is a subgroup of the serine protease enzyme family. In normal human tissues, KLK5 is highly expressed in skin, mammary gland and testis. KLK5 has been suggested to regulate cell shedding(desquamation) in conjunction with KLK7 and KLK14, given its ability to degrade proteins which form the extracellular component of cell junctions in the stratum corneum. It is proposed that KLK5 regulates this process since it is able to self-activate in addition to activating KLK7 and KLK14.</p> <p>Synonyms: Kallikrein-5,3.4.21.-,Kallikrein-like protein 2,KLK-L2,Stratum corneum tryptic enzyme,KLK5,SCTE,UNQ570/PRO1132,</p> <p>Full Gene Name: Kallikrein-5</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	25818
UniProt:	Q9Y337
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: Expressed in skin, breast, brain and testis. Expressed at the stratum granulosum of palmar skin. .</p>
Plate:	Pre-coated

Application Details

Protocol: human KLK5 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for KLK5 has been precoated onto 96-well plates. Standards(NSO, V23-S293) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for KLK5 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 KLK5 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL, 78pg/mL human KLK5 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), human milk or saliva to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human KLK5 standard solution and each sample is measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 545, Standard deviation: 38.7, CV(%): 7.1
- Sample 2: n=16, Mean(pg/ml): 1823, Standard deviation: 69.3, CV(%): 3.8
- Sample 3: n=16, Mean(pg/ml): 3240, Standard deviation: 158.8, CV(%): 4.9,
- Sample 1: n=24, Mean(pg/ml): 613, Standard deviation: 46.6, CV(%): 7.6
- Sample 2: n=24, Mean(pg/ml): 1972, Standard deviation: 98.6, CV(%): 5
- Sample 3: n=24, Mean(pg/ml): 3468, Standard deviation: 260.1, CV(%): 7.5

Restrictions: For Research Use only

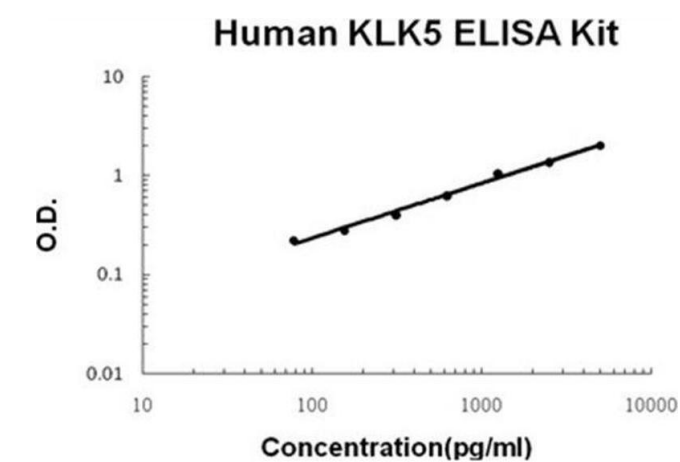
Handling

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 KLK5 PicoKine ELISA Kit standard curve