

Datasheet for ABIN2859304

**Kallikrein 8 ELISA Kit**[Go to Product page](#)**1** Image

## Overview

Quantity:	96 tests
Target:	Kallikrein 8 (KLK8)
Binding Specificity:	AA 29-260
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 KLK8/Kallikrein-8
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: Q29-G260
Specificity:	NSO, Q29-G260
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 8 (KLK8)

Alternative Name: KLK8 ([KLK8 Products](#))

Background: Protein Function: Serine protease which is capable of degrading a number of proteins such as casein, fibrinogen, kininogen, fibronectin and collagen type IV. Also cleaves L1CAM in response to increased neural activity. Induces neurite outgrowth and fasciculation of cultured hippocampal neurons. Plays a role in the formation and maturation of orphan and small synaptic boutons in the Schaffer- collateral pathway, regulates Schaffer-collateral long-term potentiation in the hippocampus and is required for memory acquisition and synaptic plasticity. Involved in skin desquamation and keratinocyte proliferation. Plays a role in the secondary phase of pathogenesis following spinal cord injury. .

Background: Kallikrein-8 is a protein that in humans is encoded by the KLK8 gene. Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. Alternate splicing of this gene results in four transcript variants encoding four different isoforms. The isoforms exhibit distinct patterns of expression that suggest roles in brain plasticity and ovarian cancer.

Synonyms: Kallikrein-8,hK8,3.4.21.118,Neuropsin,NP,Ovasin,Serine protease 19,Serine protease TADG-14,Tumor-associated differentially expressed gene 14 protein,KLK8,NRPN, PRSS19, TADG14,UNQ283/PRO322,

Full Gene Name: Kallikrein-8

Cellular Localisation: Secreted . Cytoplasm . Shows a cytoplasmic distribution in the keratinocytes.

Gene ID: 11202

UniProt: [O60259](#)

Pathways: [Complement System](#)

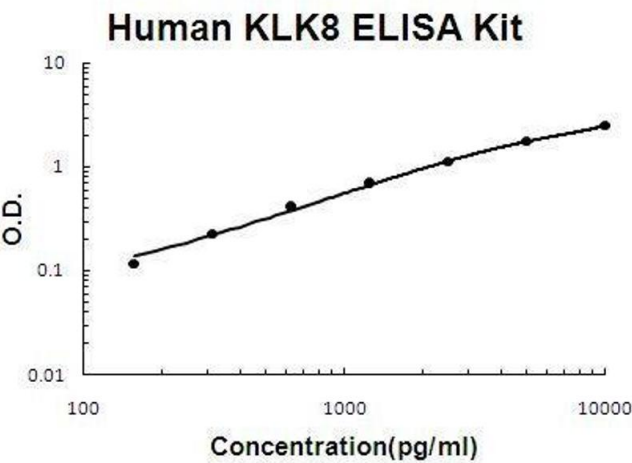
## Application Details

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:	<p>Tissue Specificity: Isoform 1 is predominantly expressed in the pancreas. Isoform 2 is expressed in adult brain and hippocampus. Isoform 1 and isoform 2 are found in fetal brain and placenta. Detected in salivary gland, uterus, thymus, breast, testis and kidney but not in spleen, liver, lung or normal ovarian tissue. Displays an 11.5-fold increase in Alzheimer disease hippocampus compared to controls and is overexpressed in some ovarian carcinomas.</p> <p>Expressed at low levels in normal skin while high levels are found in psoriasis vulgaris, seborrheic keratosis, lichen planus and squamous cell carcinoma skin samples. Expressed in the keratinocytes. .</p>
Plate:	Pre-coated
Protocol:	human KLK8 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for KLK8 has been precoated onto 96-well plates. Standards(NSO, Q29-G260) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for KLK8 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 KLK8 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 KLK8 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 KLK8 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none"><li>• Sample 1: n=16, Mean(pg/ml): 1468, Standard deviation: 67.53, CV(%): 4.6</li><li>• Sample 2: n=16, Mean(pg/ml): 3882, Standard deviation: 260.1, CV(%): 6.7</li><li>• Sample 3: n=16, Mean(pg/ml): 6352, Standard deviation: 349.4, CV(%): 5.5,</li><li>• Sample 1: n=24, Mean(pg/ml): 1625, Standard deviation: 95.9, CV(%): 5.9</li><li>• Sample 2: n=24, Mean(pg/ml): 4190, Standard deviation: 301.7, CV(%): 7.2</li><li>• Sample 3: n=24, Mean(pg/ml): 6526, Standard deviation: 417.7, CV(%): 6.4</li></ul>
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 KLK8/Kallikrein-8 PicoKine ELISA Kit standard curve