

Datasheet for ABIN2859212

PEDF ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	PEDF (SERPINF1)
Binding Specificity:	AA 1-418
Reactivity:	Human
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 Human PEDF/SerpinF1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: M1-P418
Specificity:	NSO, M1-P418
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<20pg/mL

Product Details

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
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Target Details

Target:	PEDF (SERPINF1)
Alternative Name:	SERPINF1 (SERPINF1 Products)
Background:	<p>Protein Function: Neurotrophic protein, induces extensive neuronal differentiation in retinoblastoma cells. Potent inhibitor of angiogenesis. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity. .</p> <p>Background: Pigment epithelium-derived factor (PEDF) is also known as serpin F1 (SERPINF1). In humans, it is encoded by the SERPINF1 gene. PEDF has a variety of functions including antiangiogenic, antitumorigenic, and neurotrophic properties. It suppresses retinal neovascularization and endothelial cell proliferation. And Antiangiogenic function is also conferred by PEDF through inhibition of both VEGFR-1 and VEGFR-2. In addition, the antitumorigenic effects of PEDF are not only due to inhibition of supporting vasculature, but also due to effects on the cancer cells themselves. PEDF is shown to inhibit cancer cell proliferation and increase apoptosis via the FAS/FASL pathway. Expression of PEDF in the human retina is found at 7.4 weeks of gestation, suggesting it may play a role in retinal neuron differentiation.</p> <p>Synonyms: Pigment epithelium-derived factor,PEDF,Cell proliferation-inducing gene 35 protein,EPC-1,Serpin F1,SERPINF1,PEDF,PIG35,</p> <p>Full Gene Name: Pigment epithelium-derived factor</p> <p>Cellular Localisation: Secreted . Melanosome . Enriched in stage I melanosomes.</p>
Gene ID:	5176
UniProt:	P36955

Application Details

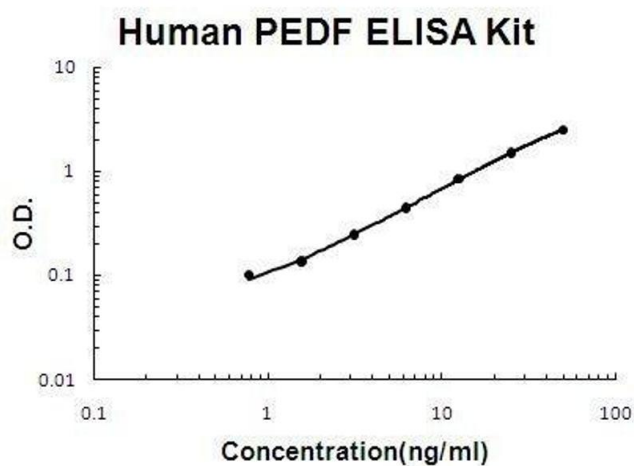
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Retinal pigment epithelial cells and blood plasma. .

Application Details

Plate:	Pre-coated
Protocol:	human PEDF ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for PEDF has been precoated onto 96-well plates. Standards(NSO, M1-P418) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for PEDF 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 PEDF 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 human PEDF 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 or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human PEDF standard solution and each sample is measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 5.62, Standard deviation: 0.259, CV(%): 4.6• Sample 2: n=16, Mean(ng/ml): 10.1, Standard deviation: 0.444, CV(%): 4.4• Sample 3: n=16, Mean(ng/ml): 25.5, Standard deviation: 1.07, CV(%): 4.2,• Sample 1: n=24, Mean(ng/ml): 6.23, Standard deviation: 0.467, CV(%): 7.5• Sample 2: n=24, Mean(ng/ml): 12.1, Standard deviation: 0.835, CV(%): 6.9• Sample 3: n=24, Mean(ng/ml): 26.4, Standard deviation: 1.95, CV(%): 7.4
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 PEDF/SerpinF1 PicoKine ELISA Kit standard curve