Datasheet for ABIN411379

Resistin ELISA Kit

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Overview

Quantity:	96 tests
Target:	Resistin (RETN)
Binding Specificity:	AA 19-108
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 Resistin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: K19-P108
Specificity:	Expression system for standard: E.coli Immunogen sequence: K19-P108
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<3pg/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:	Resistin (RETN)
Alternative Name:	RETN (RETN Products)
Background:	Protein Function: Hormone that seems to suppress insulin ability to stimulate glucose uptake into adipose cells. Potentially links obesity to diabetes. Background: Resistin is an adipose-derived hormone postulated to link adiposity to insulin resistance.1 Type 2 diabetes, characterized by target-tissue resistance to insulin, is epidemic in industrialized societies and is strongly associated with obesity. Adipocytes secrete a unique signalling molecule, which called resistin(for resistance to insulin), that may be the hormone potentially links obesity to diabetes.2 Resistin is overexpressed in human adipose tissue of obese individuals and is likely to modulate insulin sensitivity. Resistin is, therefore, a candidate gene for insulin resistance.3 The standard product used in this kit is human Resistin with the molecular mass of 51-53KDa. The detected Resistin includes zymogen and active enzyme. Synonyms: Resistin,Adipose tissue-specific secretory factor,ADSF,C/EBP-epsilon-regulated myeloid-specific secreted cysteine-rich protein,Cysteine-rich secreted protein A12-alpha-like 2,Cysteine-rich secreted protein FIZZ3,RETN,FIZZ3, HXCP1, RSTN,UNQ407/PRO1199, Full Gene Name: Resistin Cellular Localisation: Secreted.
Gene ID:	56729
UniProt:	Q9HD89
Pathways:	Feeding Behaviour, Smooth Muscle Cell Migration

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 resistin/FIZZ family.

Application Details

	Tissue Specificity: Expressed only in fatty tissues.
Plate:	Pre-coated
Protocol:	human Resistin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Resistin has been precoated onto 96-well plates. Standards(E.coli, K19-P108) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Resistin 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 Resistin 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 Resistin 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 Resistin standard solution and each sample is measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 534, Standard deviation: 28.84, CV(%): 5.4 • Sample 2: n=16, Mean(pg/ml): 1453, Standard deviation: 88.63, CV(%): 6.1 • Sample 3: n=16, Mean(pg/ml): 2323, Standard deviation: 109.2, CV(%): 4.7, • Sample 1: n=24, Mean(pg/ml): 554, Standard deviation: 45.98, CV(%): 8.3 • Sample 2: n=24, Mean(pg/ml): 1532, Standard deviation: 119.5, CV(%): 7.8 • Sample 3: n=24, Mean(pg/ml): 2486, Standard deviation: 200, CV(%): 8
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

Publications

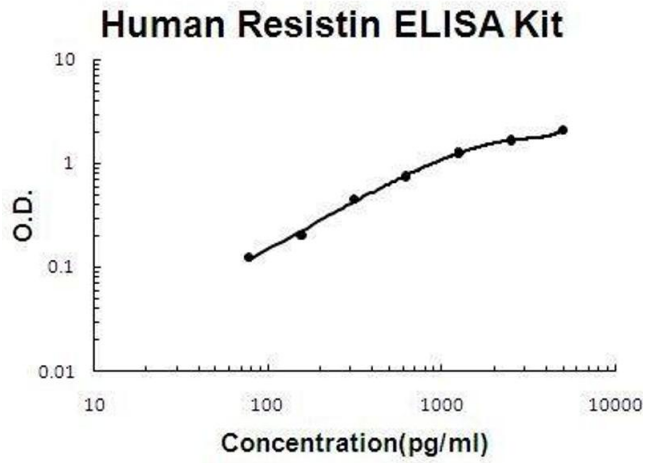
Product cited in:	Montazerifar, Bolouri, Paghalea, Mahani, Karajibani: "Obesity, Serum Resistin and Leptin Levels

Publications

Linked to Coronary Artery Disease." in: **Arquivos brasileiros de cardiologia**, Vol. 107, Issue 4, pp. 348-353, (2017) (PubMed).

Niu, Li, Li, Song, Jin, Liu: "Serum resistin positively correlates with serum lipids, but not with insulin resistance, in first-degree relatives of type-2 diabetes patients: an observational study in China." in: **Medicine**, Vol. 96, Issue 16, pp. e6622, (2017) (PubMed).

Images



ELISA

Image 1. Human Resistin PicoKine ELISA Kit standard curve