

Datasheet for ABIN411385

ADIPOQ ELISA Kit**1** Image**13** Publications[Go to Product page](#)

Overview

Quantity:	96 tests
Target:	ADIPOQ
Binding Specificity:	AA 18-247
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	312-20000 pg/mL
Minimum Detection Limit:	312 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Adiponectin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Tissue Homogenate, Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: E18-N247
Specificity:	Expression system for standard: NSO Immunogen sequence: E18-N247
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: ADIPOQ

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

Background: Protein Function: Important adipokine involved in the control of fat metabolism and insulin sensitivity, with direct anti-diabetic, anti-atherogenic and anti-inflammatory activities. Stimulates AMPK phosphorylation and activation in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion. Antagonizes TNF-alpha by negatively regulating its expression in various tissues such as liver and macrophages, and also by counteracting its effects. Inhibits endothelial NF-kappa-B signaling through a cAMP-dependent pathway. May play a role in cell growth, angiogenesis and tissue remodeling by binding and sequestering various growth factors with distinct binding affinities, depending on the type of complex, LMW, MMW or HMW. .

Background: Adiponectin(ADPN) is a hormone secreted by adipocytes that regulates energy homeostasis and glucose and lipid metabolism. Adiponectin is a new member of the family of soluble defense collagens, in hematopoiesis and immune responses. It is an important negative regulator in hematopoiesis and immune systems and raise the possibility that it may be involved in ending inflammatory responses through its inhibitory functions. Adiponectin is mapped to 3q27 and can protect the organism from systemic inflammation by promoting the clearance of early apoptotic cells by macrophages through a receptor-dependent pathway involving calreticulin.

Synonyms: Adiponectin,30 kDa adipocyte complement-related protein,Adipocyte complement-related 30 kDa protein,ACRP30,Adipocyte, C1q and collagen domain-containing protein,Adipocyte-specific protein AdipoQ,Adipoq,Acdc, Acrp30, Apm1,

Full Gene Name: Adiponectin

Cellular Localisation: Secreted.

Gene ID: 11450

UniProt: [Q60994](#)

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: Contains 1 C1q domain. Tissue Specificity: Synthesized exclusively by adipocytes and secreted into plasma.
Plate:	Pre-coated
Protocol:	mouse Adiponectin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Adiponectin has been precoated onto 96-well plates. Standards(NSO, E18-N247) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Adiponectin 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 mouse Adiponectin amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 20000pg/mL, 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL mouse Adiponectin 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 mouse cell culture supernatants, serum, plasma(heparin, EDTA), tissue homogenates or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse Adiponectin standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 3.35, Standard deviation: 0.160, CV(%): 5• Sample 2: n=16, Mean(ng/ml): 6.82, Standard deviation: 0.360, CV(%): 5.3• Sample 3: n=16, Mean(ng/ml): 13.50, Standard deviation: 0.756, CV(%): 5.6,• Sample 1: n=24, Mean(ng/ml): 3.39, Standard deviation: 0.190, CV(%): 5.4• Sample 2: n=24, Mean(ng/ml): 6.60, Standard deviation: 0.380, CV(%): 5.8• Sample 3: n=24, Mean(ng/ml): 13.20, Standard deviation: 0.818, CV(%): 6.2
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

Handling

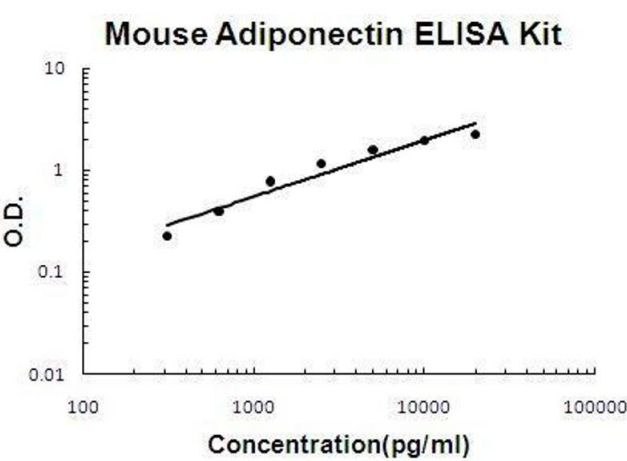
Expiry Date: 12 months

Publications

Product cited in: Wang, Lee, Chou, Yang, Wei, Chen, Yao, Hsu, Zhu, Ying, Ye, Wang, Lim, Xia, Ko, Liu, Liu, Wu, Wang, Li, Prakash, Katz, Kang, Kim, Fleming, Fogelman, Javle, Maitra, Hung: "Angiogenin/Ribonuclease 5 Is an EGFR Ligand and a Serum Biomarker for Erlotinib Sensitivity in Pancreatic Cancer." in: **Cancer cell**, Vol. 33, Issue 4, pp. 752-769.e8, (2019) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

Images



ELISA

Image 1. Mouse Adiponectin PicoKine ELISA Kit standard curve