



Mouse adiponectin,ADP ELISA Kit

Product Code	CSB-E07272m
Abbreviation	ADP
Protein Biological Process 1	Cardiovascular
Target Name	adiponectin, C1Q and collagen domain containing
Uniprot No.	Q60994
Alias	ACDC, ACRP30, ADIPQTL1, ADPN, APM-1, APM1, GBP28, adiponectin, OTTHUMP00000210047 OTTHUMP00000210048 adipocyte, C1Q and collagen domain containing adipocyte, C1Q and collagen domain-containing adipo
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates, cell lysates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cardiovascular
Gene Names	Adipoq
Tag Info	quantitative
Protein Description	Sandwich

Description

CUSABIO's mouse adiponectin (ADP) ELISA kit is an in vitro enzyme-linked immunosorbent assay for the quantitative determination of adiponectin concentrations in serum, plasma, cell culture supernates, tissue homogenates, and cell lysates. This assay exclusively recognizes mouse adiponectin. The quantitative sandwich ELISA technique of this kit is based on adiponectin antibody-adiponectin antigen interactions and an HRP colorimetric detection system to detect the levels of adiponectin in samples. The intensity of the color is positively proportional to the amount of bound adiponectin in the initial step.

Adiponectin, the most abundant plasma adipokine, plays an important role in the regulation of glucose, lipid metabolism, and insulin sensitivity through its anti-inflammatory, anti-fibrotic, anti-oxidant, angiogenic, and vasodilatory properties. Through its receptor AdipoR1 and AdipoR2, adiponectin signaling is involved in



numerous essential regulatory cellular signaling mechanisms including AMPK, p38/MAPK signaling, STAT3, and lipid metabolic pathways. Weight loss or caloric restriction results in increasing adiponectin levels, and this increase is related to enhanced insulin sensitivity. Low plasma levels of adiponectin, also known as hypoadiponectinemia, are linked to the increased prevalence of obesity-associated diseases, including type 2 diabetes, coronary heart disease, and hypertension.

Target Details

This gene is expressed in adipose tissue exclusively. It encodes a protein with similarity to collagens X and VIII and complement factor C1q. The encoded protein circulates in the plasma and is involved with metabolic and hormonal processes.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean (ng/ml)	1.221	1.348	1.289	1.251	1.288	1.288
SD	0.061	0.059	0.065	0.043	0.074	0.067
CV(%)	7.064	6.515	7.331	4.921	8.350	7.560

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse ADP in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

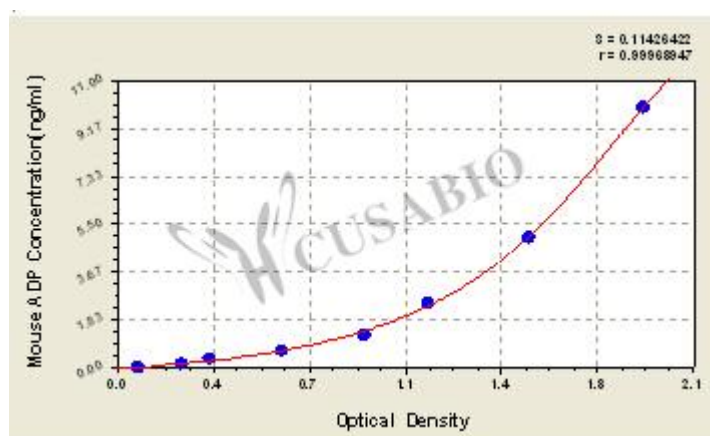


	Sample	Serum(n=4)
1:1000	Average %	89
	Range %	82-104
1:2000	Average %	95
	Range %	91-109
1:4000	Average %	92
	Range %	85-96
1:8000	Average %	97
	Range %	90-112

	Sample	Cell culture supernates (n=4)
1:1	Average %	91
	Range %	87-103
1:2	Average %	88
	Range %	82-109
1:4	Average %	90
	Range %	84-97
1:8	Average %	94
	Range %	91-114

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	corrected
0	0.079	0.089	0.084	
0.156	0.254	0.233	0.244	0.160
0.313	0.341	0.350	0.346	0.262
0.625	0.641	0.592	0.617	0.533
1.25	0.935	0.915	0.925	0.841
2.5	1.167	1.150	1.158	1.074
5	1.540	1.527	1.534	1.450
10	1.990	1.935	1.960	1.876

Msds

{\"0\":{\"fileurl\":\"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E07272m.pdf\",\"filename\":\"MSDS\"}}