ARG82677
Mouse Adiponectin ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG82677 Mouse Adiponectin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse Adiponectin in serum, plasma and cell culture supernatants.
Tested Reactivity	Ms
Species Does Not React With	Hu
Tested Application	ELISA
Specificity	Not react with Mouse AgRP / ART and Human Adiponectin. The kit can only recognizes Mouse full length Adiponectin.
Target Name	Adiponectin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	15.6 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	31.2 - 2000 pg/ml
Sample Volume	100 µl
Precision	CV: less than 10%
Alternate Names	Adipose most abundant gene transcript 1 protein; ADPN; APM-1; Gelatin-binding protein; APM1; ACDC; Adiponectin; apM-1; ACRP30; ADIPQTL1; GBP28; 30 kDa adipocyte complement-related protein; Adipocyte, C1q and collagen domain-containing protein; Adipocyte complement-related 30 kDa protein

Application Instructions

Assay Time	~ 3.5 hours

Properties

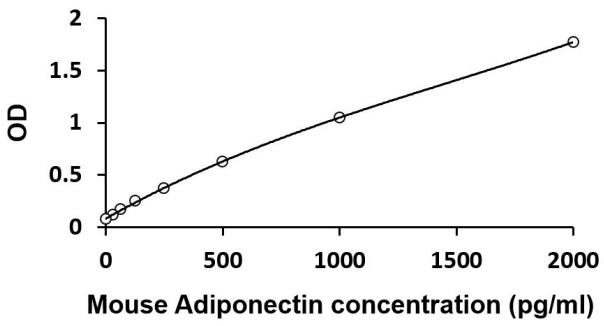
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ADIPOQ
Gene Full Name	adiponectin, C1Q and collagen domain containing
Background	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. Mutations in this gene are associated with adiponectin deficiency. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Apr 2010]
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. [UniProt]
Highlight	Related products: Adiponectin antibodies; Adiponectin ELISA Kits; Adiponectin Duos / Panels; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	Hydroxylated Lys-33 was not identified in PubMed:16497731, probably due to poor representation of the N-terminal peptide in mass fingerprinting. HMW complexes are more extensively glycosylated than smaller oligomers. Hydroxylation and glycosylation of the lysine residues within the collagene-like domain of adiponectin seem to be critically involved in regulating the formation and/or secretion of HMW complexes and consequently contribute to the insulin-sensitizing activity of adiponectin in hepatocytes (By similarity). O-glycosylated. Not N-glycosylated. O-linked glycans on hydroxylysines consist of Glc-Gal disaccharides bound to the oxygen atom of post-translationally added hydroxyl groups. Sialylated to varying degrees depending on tissue. Thr-22 appears to be the major site of sialylation. Higher sialylation found in SGBS adipocytes than in HEK fibroblasts. Sialylation is not required neither for heterodimerization nor for secretion. Not sialylated on the glycosylated hydroxylysines. Desialylated forms are rapidly cleared from the circulation. [UniProt]
Cellular Localization	Secreted. [UniProt]

Images



ARG82677 Mouse Adiponectin ELISA Kit standard curve image

ARG82677 Mouse Adiponectin ELISA Kit results of a typical standard run with optical density reading at 450 nm.