Technical support: order@acebiolab.com
Phone: 886-3-2870051

Datasheet

Ver.1 Date : 20180222

Adipogenesis Marker Antibody Sampler Kit

Cat# AK0109

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

Adipocytes are the primary cellular component of adipose tissue and play a key role in the storage of triacylglycerol. Adipogenesis is the cellular process where preadipocytes differentiate into adipocytes. Fatty acid binding proteins (FABPs) act as cytoplasmic lipid chaperones by binding fatty acids and lipids for transport to various cellular pathways. The predominant fatty acid binding protein found in adipocytes is FABP4. Adiponectin is an adipokine expressed exclusively in brown and white adipocytes and is secreted into the blood. It exists in three major forms: a low molecular weight trimer, a medium molecular weight hexamer and a high molecular weight multimer. Decreased adiponectin levels are seen in obese and insulin-resistant mice and humans, suggesting that this adipokine is critical for maintenance of insulin sensitivity. Peroxisome proliferator-activated receptor γ (PPAR γ) is a transcriptional activator preferentially expressed in adipocytes, vascular smooth muscle cells, and macrophages. Acetyl-CoA carboxylase (ACC) is a key fatty acid biosynthesis and oxidation enzyme that is responsible for the carboxylation of acetyl-CoA to malonyl-CoA. Phosphorylation of acetyl-CoA carboxylase by AMPK at Ser79 or by PKA at Ser1200 inhibits ACC enzymatic activity. ACC is a potential target of anti-obesity drugs. CCAAT/enhancer-binding proteins (C/EBPs) transcription factors are critical for cellular differentiation, terminal function, and the inflammatory response. Phosphorylation of C/EBP α at Thr222, Thr226, and Ser230 by GSK-3 may be required for adipogenesis. Perilipin localizes to the periphery of lipid droplets and serves as a protective coating against lipases. Evidence suggests that PKA regulates lipolysis by phosphorylating perilipin, resulting in a conformational change that exposes lipid droplets to endogenous, hormone-sensitive lipases. Hence, perilipin plays a pivotal role in lipid storage. Fatty acid synthase (FASN) catalyzes the synthesis of long-chain fatty acids from acetyl-CoA and malonyl-CoA. FA

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340331	Phospho-ACACA (Ser80) Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340416	ACACA Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340417	ADIPOQ Polyclonal Antibody	20µL	WB, ELISA	Human, Mouse, Rat	Rabbit

A340451	CEBP alpha Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340313	Phospho-CEBP alpha (Thr230) Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340332	Phospho-CEBP alpha (Ser21) Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340519	FASN Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340129	PLIN1 Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340647	PPARG Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340300	Phospho-PPARG (Ser112) Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse, Rat	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat

PRODUCT USE LIMITATION

These products are intended for research use only.