

PPAR γ Regulated Fatty Acid Metabolism Antibody Sampler Kit

Cat# AK0248

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

PRODUCT DESCRIPTION

AMPK is a heterotrimeric complex composed of a catalytic α subunit and regulatory β and γ subunits, each of which is encoded by two or three distinct genes (α 1, 2; β 1, 2; γ 1, 2, 3). The kinase is activated by an elevated AMP/ATP ratio due to cellular and environmental stress, such as heat shock, hypoxia, and ischemia. The tumor suppressor LKB1 phosphorylates AMPK α at Thr172 in the activation loop, and this phosphorylation is required for AMPK activation. Accumulating evidence indicates that AMPK not only regulates the metabolism of fatty acids and glycogen, but also modulates protein synthesis and cell growth through EF2 and TSC2/mTOR pathways, as well as blood flow via eNOS/nNOS. CBP (CREB-binding protein) is a transcriptional co-activator that associates with PPAR γ . CBP also contains histone acetyltransferase (HAT) activity, allowing it to acetylate histones and other proteins. General Control of Amino Acid Synthesis Yeast Homolog Like 2 (GCN5L2) is a transcription adaptor protein and a histone acetyltransferase (HAT) that functions as the catalytic subunit of the STAGA and TFTC transcription coactivator complexes. GCN5L2 is 73% homologous to the p300/CBP-associated factor PCAF, another HAT protein found in similar complexes. GCN5L2 acetylates non-histone proteins such as the transcription co-activator PGC1- α . Peroxisome proliferator-activated receptor γ (PPAR γ) is a member of the ligand-activated nuclear receptor superfamily and functions as a transcriptional activator. PPAR γ is preferentially expressed in adipocytes as well as in vascular smooth muscle cells and macrophage. The Silent Information Regulator (SIR2) family of genes is a highly conserved group of genes that encode nicotinamide adenine dinucleotide (NAD)-dependent protein deacetylases, also known as class III histone deacetylases. SirT1, the mammalian ortholog of Sir2, is a nuclear protein implicated in the regulation of many cellular processes, including apoptosis, cellular senescence, endocrine signaling, glucose homeostasis, aging, and longevity.

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340323	Phospho-AMPK alpha1/2 (Thr183/172) Polyclonal Antibody	20 μ L	WB, IHC, ELISA	Human, Mouse, Rat, Monkey	Rabbit
A340424	AMPK alpha1 Polyclonal Antibody	20 μ L	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit

A340425	AMPK alpha1/2 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse, Rat, Monkey	Rabbit
A340474	CREBBP Polyclonal Antibody	20µL	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
A340530	GCN5 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse	Rabbit
A340647	PPARG Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340669	SIRT1 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse	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.