

产品名称: AMPK α 1 (phospho-Ser485) Rabbit Polyclonal Antibody
产品货号: APRab04227



产品概述 (Summary)

产品名称 (Production Name)	AMPK α 1 (phospho-Ser485) Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	WB
种属反应性 (Reactivity)	Human, Mouse, Rat

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Phosphorylated
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	PRKAA1
别名 (Alternative Names)	5'-AMP-activated protein kinase catalytic subunit alpha-1 (AMPK subunit alpha-1) (EC 2.7.11.1) (Acetyl-CoA carboxylase kinase) (ACACA kinase) (EC 2.7.11.27) (Hydroxymethylglutaryl-CoA reductase kinase) (HMGCR kinase) (EC 2.7.11.31) (Tau-protein kinase PRKAA1) (EC 2.7.11.26)
基因 ID (Gene ID)	5562.0
蛋白 ID (SwissProt ID)	Q13131. Synthesized phospho peptide around human AMPK α 1 (Ser485)

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:1000-1:2000
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蛋白分子量 (Molecular Weight) 65kDa

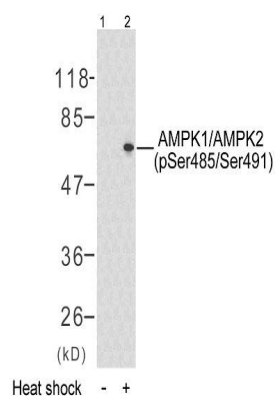
研究背景 (Background)

The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Binding of AMP results in allosteric activation, inducing phosphorylation on Thr-174 by STK11 in complex with STE20-related adapter-alpha (STRAD alpha) pseudo kinase and CAB39. Also activated by phosphorylation by CAMKK2 triggered by a rise in intracellular calcium ions, without detectable changes in the AMP/ATP ratio.,function:Responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. Appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5'-AMP rises in response to fuel limitation and/or hypoxia. This is a catalytic subunit.,sequence caution:Translation N-terminally shortened.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Heterotrimer of an alpha catalytic subunit, a beta and a gamma non-catalytic subunits. Interacts with FNIP1 and FNIP2.,

研究领域 (Research Area)

Insulin Receptor; mTOR; AMPK

图片 (Image Data)



Western blot analysis of lysates from HeLa cells treated with heat shock, using AMPK1 (Phospho-Ser485) Antibody. The lane on the right is blocked with the phospho peptide.

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注意事项 (Note)

For research use only .