

## Phospho-AMPK $\alpha$ 1 (Ser496) Antibody

<b>CATALOG NO:</b>	A1247-100 100 $\mu$ l
<b>ALTERNATE NAMES:</b>	PRKAA1; AMPK1; 5'-AMP-activated protein kinase catalytic subunit alpha-1; AMPK subunit alpha-1; Acetyl-CoA carboxylase kinase; ACACA kinase; Hydroxymethylglutaryl-CoA reductase kinase; HMGCR kinase; Tau-protein kinase PRKAA1
<b>AMOUNT:</b>	100 $\mu$ l (1 mg/ml)
<b>IMMUNOGEN:</b>	Synthesized peptide derived from human AMPK $\alpha$ 1 around the phosphorylation site of S496 (420-500aa)
<b>MOL. WEIGHT</b>	62 kDa
<b>HOST/ISOTYPE:</b>	Rabbit IgG
<b>SPECIES REACTIVITY:</b>	Human, mouse, rat
<b>SPECIFICITY:</b>	Phospho-AMPK $\alpha$ 1 (Ser496) Polyclonal Antibody detects endogenous levels of AMPK $\alpha$ 1 protein only when phosphorylated at Ser496.
<b>PURIFICATION:</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
<b>FORM:</b>	Liquid
<b>FORMULATION:</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide
<b>STORAGE CONDITIONS:</b>	Store at -20°C. Avoid repeated freeze/thaw cycles.
<b>DESCRIPTION:</b>	Catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. Acts as a key regulator of cell growth and proliferation by phosphorylating TSC2, RPTOR and ATG1/ULK1: in response to nutrient limitation, negatively regulates the mTORC1 complex by phosphorylating RPTOR component of the mTORC1 complex and by phosphorylating and activating TSC2.
<b>APPLICATION:</b>	WB 1:500-1:2000; IHC 1:100-1:300; ELISA 1:20000

**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user.



Western Blot analysis of HeLa cells using Phospho-AMPK $\alpha$ 1 (S496) Polyclonal Antibody.

### RELATED PRODUCTS:

- AMPK $\alpha$  Antibody (Cat. No. 3113-100)
- AMPK $\alpha$ 1 Antibody (Cat. No. 3110-100)
- AMPK $\beta$  Antibody (Cat. No. 3108-100)
- AMPK $\gamma$  Antibody (Cat. No. 3109-100)
- AMPK1 Antibody (Cat. No. 3112-100)
- AMPK2 Antibody (Cat. No. 3118-100)
- AMPK $\alpha$ 1 Antibody (Cat. No. 3951-100)
- AMPK $\alpha$ 2 Antibody (Cat. No. 3117-50)
- AMPK $\alpha$ 2 Antibody (Cat. No. 3169-50)

**FOR RESEARCH USE ONLY! Not to be used on humans.**