## Phospho-AMPK alpha 1 (S496) Rabbit mAb

Catalog No: #13409

Package Size: #13409-1 50ul #13409-2 100ul



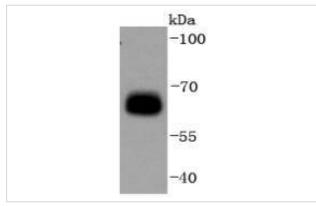
Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Product Name	Phospho-AMPK alpha 1 (S496) Rabbit mAb				
Host Species	Rabbit				
Clonality	Monoclonal				
Clone No.	SD0810				
Purification	ProA affinity purified				
Applications	WB, ICC/IF, IP				
Species Reactivity	Hu				
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Ser496 of human AMPK alpha 1.				
Other Names	5 AMP activated protein kinase alpha 1catalytic subunit antibody 5 AMP activated protein kinase catalytic				
	alpha 1 chain antibody 5' AMP activated protein kinase catalytic subunit alpha 1 antibody 5'-AMP-activated				
	protein kinase catalytic subunit alpha-1 antibody AAPK1 antibody AAPK1_HUMAN antibody ACACA kinase				
	antibody acetyl CoA carboxylase kinase antibody Al194361 antibody Al450832 antibody AL024255				
	antibody AMP -activate kinase alpha 1 subunit antibody AMP-activated protein kinase, catalytic, alpha -1				
	antibody AMPK 1 antibody AMPK alpha 1 antibody AMPK alpha 1 chain antibody AMPK antibody AMPK				
	subunit alpha-1 antibody AMPK1 antibody AMPKa1 antibody AMPKalpha1 antibody C130083N04Rik				
	antibody cb116 antibody EC 2.7.11.1 antibody HMG CoA reductase kinase antibody HMGCR kinase				
	antibody hormone sensitive lipase kinase antibody Hydroxymethylglutaryl CoA reductase kinase antibody				
	im:7154392 antibody kinase AMPK alpha1 antibody MGC33776 antibody MGC57364 antibody				
	OTTHUMP00000161795 antibody OTTHUMP00000161796 antibody PRKAA 1 antibody PRKAA1 antibody				
	Protein kinase AMP activated alpha 1 catalytic subunit antibody SNF1-like protein AMPK antibody SNF1A				
	antibody Tau protein kinase PRKAA1 antibody wu:fa94c10 antibody				
Accession No.	Swiss-Prot#:Q13131				
Jniprot	Q13131				
GeneID	5562;				
Calculated MW	64 kDa				
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.				
Storage	Store at -20°C				

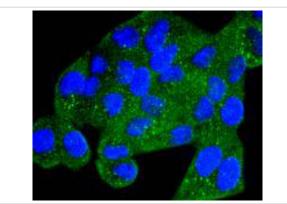
## **Application Details**

WB: 1:1,000-5,000ICC: 1:50-1:200

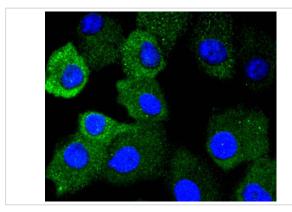
## **Images**



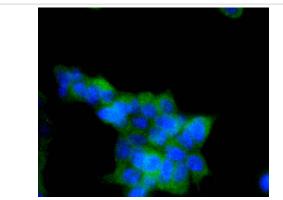
Western blot analysis of Phospho-AMPK alpha 1(S496) on 293T cells lysates using anti-Phospho-AMPK alpha 1(S496) antibody at 1/1,000 dilution.



ICC staining Phospho-AMPK alpha 1(S496) in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Phospho-AMPK alpha 1(S496) in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Phospho-AMPK alpha 1(S496) in 293T cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## Background

AMPK (5'-AMP-activated protein kinase) is a heterotrimeric complex comprising a catalytic  $\alpha$  subunit and regulatory  $\beta$  and  $\gamma$  subunits. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming bio-synthetic pathways. AMPK is activated by high AMP and low ATP through a mechanism involving allosteric regulation, promotion of phosphorylation by an upstream protein kinase known as AMPK kinase, and inhibition of dephosphorylation. Activated AMPK can phosphorylate and regulate in vivo hydroxy-methylglutaryl-CoA reductase and acetyl-CoA carboxylase, which are key regulatory enzymes of sterol synthesis and fatty acid synthesis, respectively. AMPK $\alpha$ 1 (5'-AMP-activated protein kinase catalytic subunit alpha-1), also known as PRKAA1, is a 559 amino acid protein that belongs to the CAMK Ser/Thr protein kinase family and protein kinase superfamily. Highly phosphorylated, AMPK $\alpha$ 1 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 5p13.1.

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Note: This product is for in vitro research use only