

AMPK $\alpha$ 1 (Ab-496)Antibody

Catalog No: #21130

Package Size: #21130-1 50ul #21130-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	AMPK $\alpha$ 1 (Ab-496)Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total AMPK $\alpha$ 1 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.494~498 (S-G-S-V-S) derived from Human AMPK $\alpha$ 1.
Target Name	AMPK $\alpha$ 1
Other Names	AAPK1; AMPK alpha-1 chain; AMPK-alpha1; HMG-CoA reductase kinase; PRKAA1
Accession No.	Swiss-Prot:Q13131Gene ID:5562
Uniprot	Q13131
GeneID	5562;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

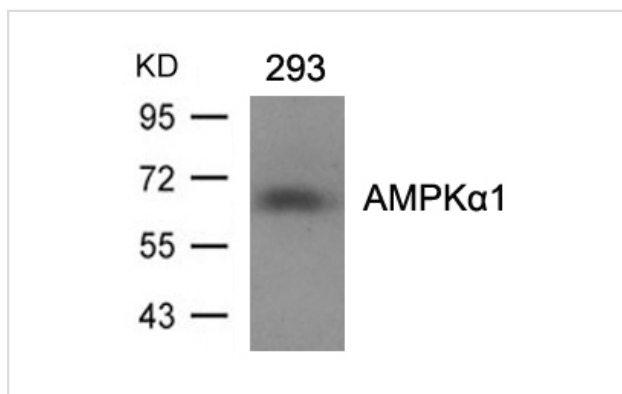
## Application Details

Predicted MW: 63kd

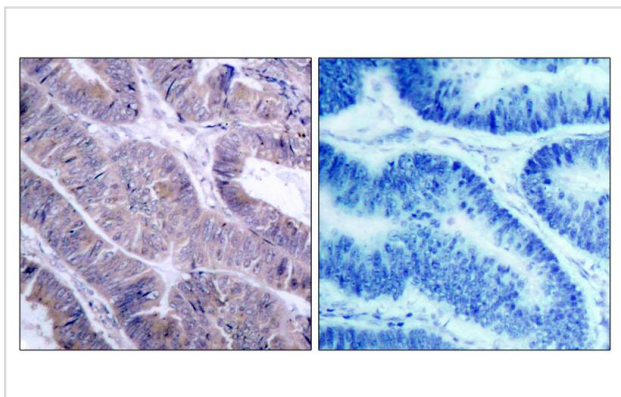
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from 293 cells using AMPK $\alpha$ 1 (Ab-496)Antibody #21130.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using AMPK $\alpha$ 1 (Ab-496)Antibody #21130 (left) or the same antibody preincubated with blocking peptide (right).

## Background

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.

Kim JE, et al. (2005) J Proteome Res. 4(4): 1339-1346.

Woods A, et al. (2003) J Biol Chem. 278(31): 28434-28442.

Note: This product is for in vitro research use only