

AMPK $\alpha$ 1/AMPK $\alpha$ 2 (Ab-183/172) Antibody

Catalog No: #21191

Package Size: #21191-1 50ul #21191-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	AMPK $\alpha$ 1/AMPK $\alpha$ 2 (Ab-183/172) 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,IF,ELISA
Species Reactivity	Human,Mouse,Rat,Monkey,Bovine,Fish
Specificity	The antibody detects endogenous level of total AMPK $\alpha$ 1/AMPK $\alpha$ 2 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa. 181~185/170~174 (L-R-T-S-C) derived from Human AMPK $\alpha$ 1/AMPK $\alpha$ 2.
Target Name	AMPK $\alpha$ 1/AMPK $\alpha$ 2
Other Names	AMPK, AMPK $\alpha$ 1
Accession No.	Swiss-Prot: Q13131NCBI Protein: NP_006242.5 NP_006243.2
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

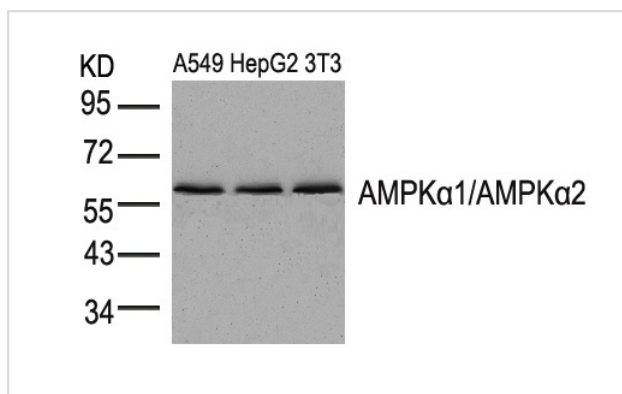
Predicted MW: 63kd

Western blotting: 1:500~1:1000

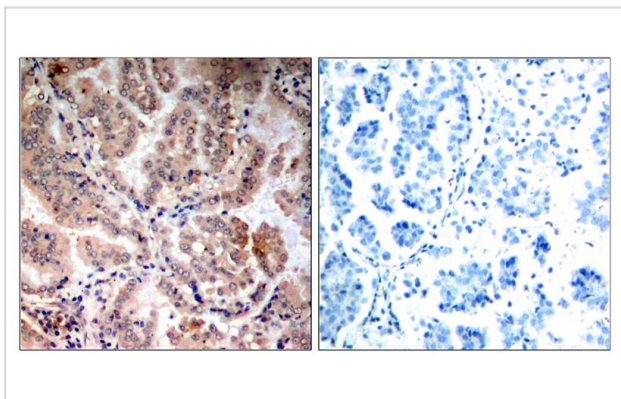
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

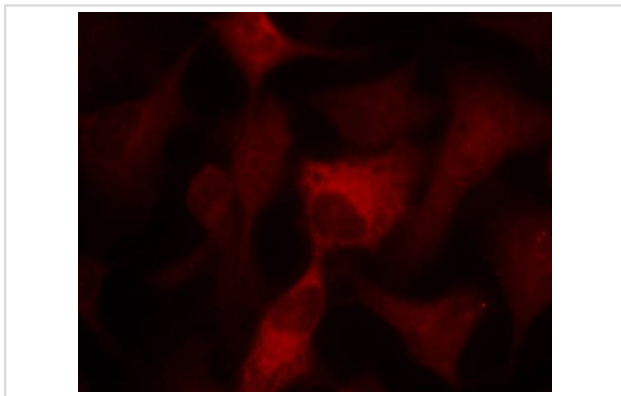
## Images



Western blot analysis of extracts from A549, HepG2 and 3T3 cells using AMPK $\alpha$ 1/AMPK $\alpha$ 2 (Ab-183/172) Antibody #21191.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using AMPK $\alpha$ 1/AMPK $\alpha$ 2 (Ab-183/172) Antibody #21191 (left) or the same antibody preincubated with blocking peptide (right).



Immunofluorescence staining of methanol-fixed HeLa cells using AMPK $\alpha$ 1/AMPK $\alpha$ 2(Ab-183/172) Antibody #21191.

## 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.

Hurley RL, et al. (2005) *J Biol Chem.* Aug 12; 280(32): 29060-29066

Woods A, et al. (2003) *Curr Biol.* Nov 11; 13(22): 2004-2008

Nielsen JN, et al. (2003) *J Appl Physiol.* Feb; 94(2): 631-641

Da Silva Xavier G, et al. (2000) *Proc Natl Acad Sci U S A.* Apr 11; 97(8): 4023-4028.

Note: This product is for in vitro research use only