

AMPK α 1(Phospho-Ser487)Antibody

Catalog No: #11174

Package Size: #11174-1 50ul #11174-2 100ul #11174-4 25ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	AMPK α 1(Phospho-Ser487)Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of AMPK α 1 only when phosphorylated at serine 487.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 487 (S-G- SP-V-S) derived from Human AMPK α 1.
Target Name	AMPK α 1
Modification	Phospho-Ser487
Other Names	AAPK1; AMPK alpha-1 chain; AMPK-alpha1; HMG-CoA redustase kinase; PRKAA1
Accession No.	Swiss-Prot: Q13131/P54646NCBI Protein: NP_006242.5
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), 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

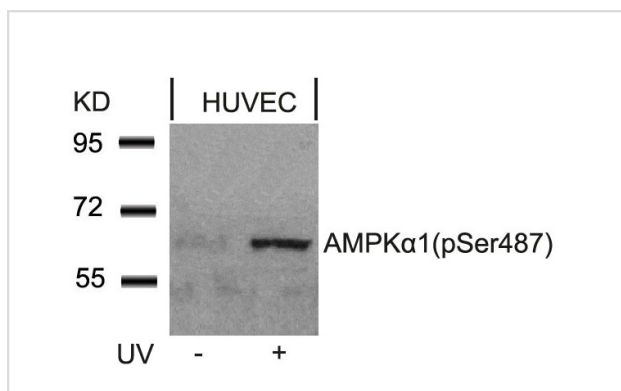
Predicted MW: 63kd

Western blotting: 1:500~1:1000

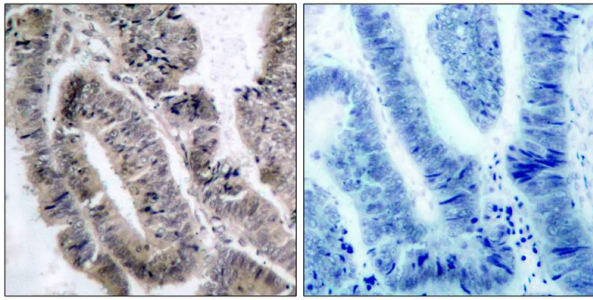
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

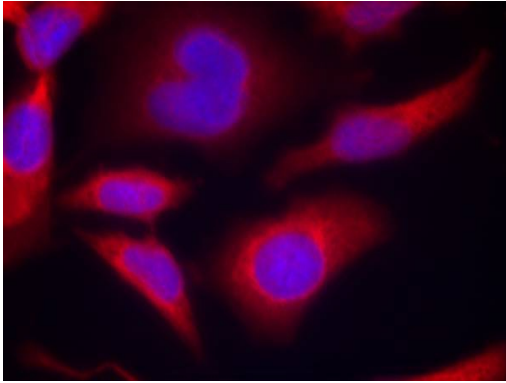
Images



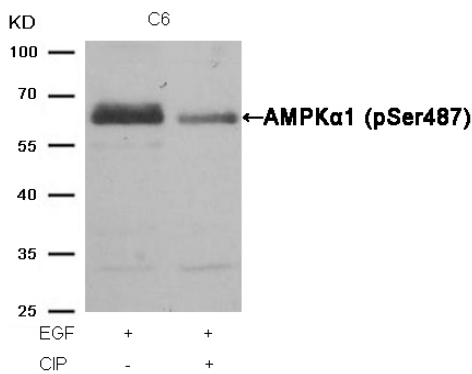
Western blot analysis of extracts from HUVEC cells untreated or treated with UV using AMPK α 1(Phospho-Ser487)Antibody #11174.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using AMPKα1(Phospho-Ser487)Antibody #11174(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed HeLa cells using AMPKα1(Phospho-Ser487)Antibody #11174.



Western blot analysis of extracts from C6 cells, treated with EGF or calf intestinal phosphatase (CIP), using AMPKα1 (Phospho-Ser487) Antibody #11174.

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.

Published Papers

Yan-Na Huang, Jian-Hua Qi, Lan Xiang et al., Construction of adiponectin-encoding plasmid DNA and overexpression in mice in vivo., Gene, 502(2):87B-C93(2012)

PMID:22561699

Note: This product is for in vitro research use only and is not intended for use in humans or animals.