




## Product datasheet

# Anti-AMPK alpha 1 (phospho S487) antibody ab131357

★★★★★ [2 Abreviews](#) [23 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-AMPK alpha 1 (phospho S487) antibody
<b>Description</b>	Rabbit polyclonal to AMPK alpha 1 (phospho S487)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide corresponding to Human AMPK alpha 1 (phospho S487) conjugated to keyhole limpet haemocyanin. Database link: <a href="#">Q13131</a> <div>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	HUVEC cell extract treated with UV, HeLa cells, Human colon carcinoma tissue
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride  PBS is without Mg <sup>2+</sup> and Ca <sup>2+</sup>
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	Antibody was purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab131357 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

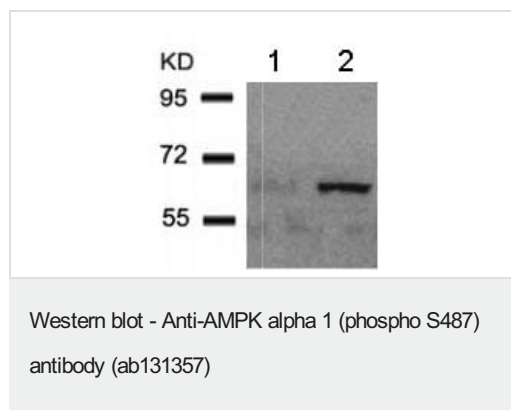
Application	Abreviews	Notes
<b>WB</b>	★★★★★ (2)	1/500 - 1/1000. Predicted molecular weight: 64 kDa.
<b>IHC-P</b>		1/50 - 1/100.
<b>ICC/IF</b>		1/100 - 1/200.

## Target

**Function** 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.

**Sequence similarities** Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily. Contains 1 protein kinase domain.

## Images

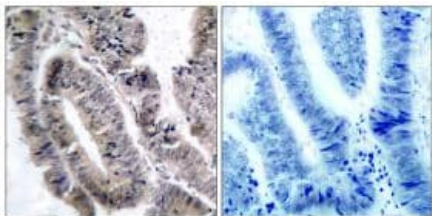


**All lanes** : Anti-AMPK alpha 1 (phospho S487) antibody (ab131357) at 1/500 dilution

**Lane 1** : HUVEC cell extract untreated

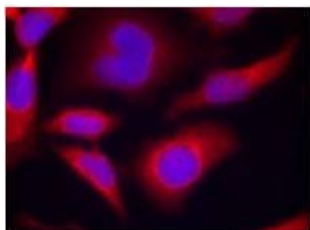
**Lane 2** : HUVEC cell extract treated with UV

**Predicted band size:** 64 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMPK alpha 1 (phospho S487) antibody (ab131357)

Immunohistochemical analysis of paraffin embedded Human colon carcinoma tissue labelling AMPK alpha 1 (phospho S487) with ab131357 antibody at a dilution of 1/50. Picture on the right was preincubated with blocking peptide.



Immunocytochemistry/ Immunofluorescence - Anti-AMPK alpha 1 (phospho S487) antibody (ab131357)

Immunofluorescence of methanol-fixed HeLa cells staining AMPK alpha 1 (phospho S487) with ab131357 antibody at a dilution of 1/100.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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