

Product datasheet

Anti-AMPK alpha 1 (phospho S487) antibody ab131357

★★★★★ 2 Abreviews 13 References 3 Images

Overview

Product name	Anti-AMPK alpha 1 (phospho S487) antibody
Description	Rabbit polyclonal to AMPK alpha 1 (phospho S487)
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	<p>Reacts with: Human</p> <p>Predicted to work with: Mouse, Rat </p>
Immunogen	<p>Synthetic peptide conjugated to KLH, surrounding phosphorylation site of serine 487 (S-G-S(p)-V-S)</p> <p>) derived from Human AMPK alpha 1 (NP_006242.5).</p> <p> Run BLAST with Run BLAST with</p>
Positive control	HUVEC cell extract treated with UV, HeLa cells, Human colon carcinoma tissue
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.</p>

Properties

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

Applications

Our [Abpromise guarantee](#) covers the use of **ab131357** in the following tested applications.

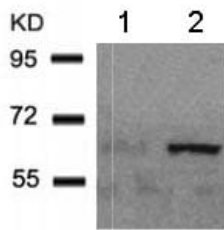
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★	1/500 - 1/1000. Predicted molecular weight: 64 kDa.
IHC-P		1/50 - 1/100.
ICC/IF		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



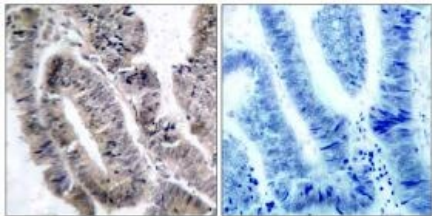
Western blot - Anti-AMPK alpha 1 (phospho S487) antibody (ab131357)

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

Lane 1 : HUVEC cell extract untreated

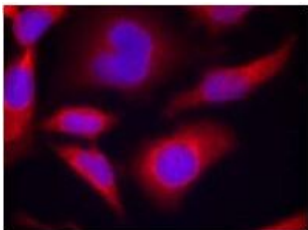
Lane 2 : HUVEC cell extract treated with UV

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"

Our Promise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish

- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors