

Datasheet: VMA00246

Description:	MOUSE ANTI AMPK ALPHA 1
Specificity:	AMPK ALPHA 1
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Isotype:	IgG1
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	■			1/1000

PrecisionAb antibodies have been extensively [validated for the western blot application](#). The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

Target Species	Human
Species Cross Reactivity	Reacts with: Rat N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Mouse monoclonal antibody prepared by affinity chromatography on Protein G from ascites
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Immunogen	Purified recombinant fragment of human AMPK alpha 1 expressed in <i>E. coli</i>
External Database Links	UniProt: Q13131 Related reagents Entrez Gene: 5562 PRKAA1 Related reagents
Synonyms	AMPK1

Specificity

Mouse anti Human AMPK alpha 1 antibody recognizes the 5'-AMP-activated protein kinase catalytic subunit alpha-1, also known as 5'-AMP-activated protein kinase catalytic subunit alpha-1, 5'-AMP-activated protein kinase, catalytic alpha-1 chain, ACACA kinase, AMP -activate kinase alpha 1 subunit, AMP-activated protein kinase, catalytic, alpha-1, AMPK alpha 1, AMPK subunit alpha-1, HMGCR kinase, acetyl-CoA carboxylase kinase, hydroxymethylglutaryl-CoA reductase kinase and tau-protein kinase PRKAA1.

Encoded by PRKAA1 gene, AMPK alpha 1 belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed (provided by RefSeq, Jul 2008).

Mouse anti Human AMPK alpha 1 antibody detects a band of 64 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti AMPK alpha 1 detects a band of approximately 64 kDa in C6 cell lysates

Instructions For Use

Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Shelf Life

As supplied, 12 months from date of despatch.

Acknowledgements

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:
Antibody (10040): <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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