

Datasheet: MCA6327

BATCH NUMBER 155797

Description:	RABBIT ANTI AMPK ALPHA 1
Specificity:	AMPK ALPHA 1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RM301
Isotype:	IgG
Quantity:	0.1 ml

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
Immunohistology - Paraffin	▪			1/100 - 1/200
Western Blotting	▪			1/100 - 1/200

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography of Protein A from animal origin-free culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin 50% Glycerol
Immunogen	A peptide corresponding to the residues near the C-terminus of Human AMPK alpha 1
External Database	UniProt:

Entrez Gene:[5562](#)

PRKAA1

[Related reagents](#)**Synonyms**

AMPK1

Specificity

Rabbit anti Human AMPK alpha 1 antibody recognizes 5'-AMP-activated protein kinase catalytic subunit alpha-1, also known as PRKAA1, AMPK1. AMPK is a highly conserved heterotrimeric protein kinase found in all eukaryotes. The heterotrimeric complex exists as multiple isoforms and consists of a catalytic alpha subunit (alpha 1 and alpha 2), which is stabilized by non-catalytic regulatory beta- and gamma- subunits ([Yan et al. 2018](#)). AMPK responds to changes in intracellular adenine nucleotide levels, regulating cellular energy balance. AMPK is activated by an increase in AMP/ADP relative to ATP, and leads to an increase in rate of catabolic (ATP-generating) pathways and decreases rate of anabolic (ATP-utilizing) pathways ([Carling et al. 2017](#)). This results in maintenance of cellular energy homeostasis under conditions of hypoxia, low glucose levels, oxidative stress. Evidence suggests that AMPK acts as a tumor suppressor and has been suggested as a target for therapy, opposing tumor progression in several cancer types in part by regulating metabolism and inflammation ([Li et al. 2015](#)).

Storage

Store at -20°C only.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10048 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6327>
 10048

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)Sheep Anti Rabbit IgG (STAR35...) [RPE](#)Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)**North & South America** Tel: +1 800 265 7376

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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