

Datasheet: MCA2673GA

Description:	MOUSE ANTI AMPK ALPHA 1/2
Specificity:	AMPK ALPHA 1/2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	34.2
Isotype:	lgG2a
Quantity:	0.1 mg

## **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			•	
Immunohistology - Frozen	•			
Immunohistology - Paraffin			•	
ELISA	•			
Immunoprecipitation	-			
Western Blotting	-			1/100 - 1/1000
Immunofluorescence	-			

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	Drosophila
Species Cross Reactivity	Reacts with: Human, Mouse, Rat Based on sequence similarity, is expected to react with: Vertebrates  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )			
Carrier Free	Yes			
Approx. Protein Concentrations	IgG concentration 1.0mg/ml			
Immunogen	29 amino acid peptide within the N-terminal catalytic domain of Drosophila AMPK alpha.			
External Database Links	UniProt:  P54646 Related reagents Q13131 Related reagents			
	Entrez Gene:			
	5563 PRKAA2 Related reagents			
	5562 PRKAA1 Related reagents			
Synonyms	AMPK, AMPK1, AMPK2			
RRID	AB_1604623			
Specificity	Mouse anti AMPK Alpha 1/2 antibody, clone 34.2 recognizes both the alpha 1 and the alpha 2 isoforms of AMP-activated protein kinase (AMPK). 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, which is stabilized by non-catalytic regulatory beta- and gamma- subunits. AMPK plays a vital role in maintaining cellular energy homeostasis and is activated by rising levels of AMP under conditions of hypoxia, ischemia, exercise, low glucose levels.			
	AMPK may play an important role in the control of type 2 diabetes and metabolic syndromes. AMPK functions as a suppressor of cell proliferation of both malignant and normal cells (Motoshima et al. 2006).			
Western Blotting	MCA2673GA detects a band of approximately 63kDa in rat brain cell lysates.			
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for			
	short term use (up to 4 weeks) and store the remaining aliquots at -20°C.			
	short term use (up to 4 weeks) and store the remaining aliquots at -20°C.  Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.			

**Health And Safety** Information

Material Safety Datasheet documentation #10040 available at:

https://www.bio-rad-antibodies.com/SDS/MCA2673GA

10040

Regulatory

For research purposes only

## Related Products

# **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) **RPE** 

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) **RPE** 

Goat Anti Mouse IgG (STAR70...) **FITC** 

Rabbit Anti Mouse IgG (STAR13...) **HRP** 

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) **FITC** 

Goat Anti Mouse IgG (STAR77...) **HRP** 

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

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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 'M437733:250318'

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