

## Datasheet: MCA4625GA

Description:	MOUSE ANTI HUMAN HEXOKINASE 1 & 2
Specificity:	HEXOKINASE 1 & 2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1A7
lsotype:	lgG1
Quantity:	0.1 mg

# **Product Details**

Applications	This product has been reported to work in the following applications. This information is derive 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		
	Flow Cytometry						
	Immunohistology - Frozen	Immunohistology - Frozen					
	Immunohistology - Paraffin						
	ELISA	•					
	Immunoprecipitation						
	Western Blotting	-	<ul> <li>1/1000 - 1/3000</li> </ul>				
	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	r titrates th	ne product f	or use in their own syste	m using appropriate		
	negative/positive controls.						
Target Species	Human						
Product Form	Purified IgG - liquid						
Preparation	Purified IgG prepared by affinity chromatography on Protein G from ascites						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.1% Sodium Azide (NaN <sub>3</sub> )						
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml						
Immunogen	Recombinant human hexokinase 2 (amino acids 1-917) purified from <i>E. coli</i> .				coli.		
External Database Links	UniProt: P52789 Related rea	<u>gents</u>					

	P19367 Related reagents
	Entrez Gene:
	3099 HK2 Related reagents
	3098 HK1 Related reagents
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse FO myeloma cell line.
Specificity	<b>Mouse anti Human Hexokinase 1&amp;2, clone 1A7</b> recognizes human hexokinase 1 (HK1) and hexokinase 2 (HK2), ~102 kDa allosteric enzymes of the glycolytic pathway, which catalyse the phosphorylation of glucose to form glucose-6-phosphate (Glc-6-P).
	Hexokinase 1 is predominantly expressed in the brain while Hexokinase 2 is predominantly expressed in skeletal muscle. Both are members of four distinct mammalian hexokinase isozymes (hexokinase type I to IV), which localize to the outer membrane of mitochondria and is regulated (inhibited) by its product Glc-6-P ( <u>Wolf <i>et al.</i> 2011</u> )
Western Blotting	MCA4625GA detects a band of approximately 102 kDa in Jurkat cell lysates.
Further Reading	1. Wilson, J.E. (2003) Isozymes of mammalian hexokinase: structure, subcellular localization and metabolic function. <u>J Exp Biol. 206 (Pt 12): 2049-57.</u>
Storage	Store at +4°C or at -20°C if preferred.
	Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10303 available at: 10303: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10303.pdf</u>
Regulatory	For research purposes only

# **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR76)	RPE				
Goat Anti Mouse IgG IgA IgM (STAR87) <u>Alk. Phos.</u> , <u>HRP</u>					
Goat Anti Mouse IgG (H/L) (STAR117)	<u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®549</u> ,				
	DyLight®649, DyLight®680, DyLight®800,				
	FITC, HRP				
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>				
Goat Anti Mouse IgG (STAR77)	HRP				
Rabbit Anti Mouse IgG (STAR12)	RPE				
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP				
Rabbit Anti Mouse IgG (STAR8)	DyLight®800				
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>				
Rabbit Anti Mouse IgG (STAR13)	HRP				

Human Anti Mouse IgG1 (HCA036...) HRP

### **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South	Tel: +1 800 265 7376	Worldwide
America	Fax: +1 919 878 3751	
	Email: antibody_sales_us@bio-rac	l.com

Tel: +44 (0)1865 852 700 **Europe** Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.com Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_de@bio-rad.com

'M313837:180403'

### Printed on 01 May 2018

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