Datasheet: MCA2698

Description:	MOUSE ANTI HUMAN HEXOKINASE 1
Specificity:	HEXOKINASE 1
Other names:	HEXOKINASE TYPE I
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4D7
Isotype:	IgG2a
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/1000 - 1/2000

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
Species Cross Reactivity	Reacts with: Mouse **N.B.** Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.02% Sodium Azide (NaN_3) 10% Glycerol
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human hexokinase 1 (amino acids 1-917) purified from *Escherichia coli*.

External Database Links	**UniProt:** P19367 Related reagents **Entrez Gene:** 3098 HK1 Related reagents
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	**Mouse anti Human hexokinase 1, clone 4D7** recognizes human hexokinase 1, a 102 kDa major allosteric enzyme of the glycolytic pathway, which catalyses the phosphorylation of glucose to form glucose-6-phosphate (Glc-6-P). Hexokinase 1 is the first of four distinct mammalian hexokinase isozymes (hexokinase type 1 to 4), expressed in the outer membrane of mitochondria and is regulated (inhibited) by its product Glc-6-P. A deficiency in hexokinase 1 is implicated in the rare hereditary autosomal recessive disease known as nonspherocytic haemolytic anaemia (Newman *et al.* 1980). Mouse anti hexokinase 1, clone 4D7 recognizes an epitope common to all isoforms of human hexokinase.
Western Blotting	MCA2698 detects a band of approximately 102kDa in HepG2 cell lysates.
Further Reading	1. Wilson, J.E. (2003) Isozymes of mammalian hexokinase: structure, subcellular localization and metabolic function. J Exp Biol. 206 (Pt 12): 2049-57.
Storage	Store at +4^{o}C or at -20^{o}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 #10049 available at: 10049: https://www.bio-rad-antibodies.com/uploads/MSDS/10049.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
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...)	FITC
Human Anti Mouse IgG2a (HCA037...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

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

Worldwide
Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe
Tel: +49 (0) 89 8090 95 21
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'M312546:180219'

Printed on 04 May 2018

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