

## Datasheet: MCA4739P BATCH NUMBER 161582

Description:	MOUSE ANTI RABBIT GAPDH:HRP
Specificity:	GAPDH
Other names:	GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	6C5
Isotype:	lgG1
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	information. For general protocol recommendations, please visit <u>www.bio-</u>					
	rad-antibodies.com/protocols.						
		Yes	No	Not Determined	Suggested Dilution		
	Flow Cytometry			•			
	Immunohistology - Frozen	-					
	Immunohistology - Paraffin			•			
	ELISA	-					
	Immunoprecipitation			•			
	Western Blotting	-			1/1000 - 1/5000		
	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	Rabbit						
Species Cross Reactivity	Reacts with: Human, Pig, Dog, Cat, Rat, Mouse, Xenopus, Tube-nosed Bat, Chicken, Sheep, African green monkey, Crucian Carp Based on sequence similarity, is expected to react with:Vertebrates <b>N.B.</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 conjugated to Horseradish Peroxidase (HRP) - liquid				
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant				
Buffer Solution	Phosphate buffered saline				
Preservative Stabilisers	0.01% Thiomersal				
Approx. Protein Concentrations	IgG concentration 1.0mg/ml				
Immunogen	Rabbit muscle GAPDH.				
External Database Links	UniProt:P46406Related reagentsP04406Related reagentsP04797Related reagentsP16858Related reagentsP00355Related reagents				
	Entrez Gene:100009074GAPDHRelated reagents2597GAPDHRelated reagents396823GAPDHRelated reagents14433GapdhRelated reagents24383GapdhRelated reagents				
Synonyms	Gapd, GAPD				
RRID	AB_10863316				
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line.				
Specificity	<ul> <li>Mouse anti Rabbit GAPDH antibody, clone 6C5 recognizes glyceraldehyde- 3-phosphate dehydrogenase (GAPDH), a ~36 kDa multifunctional protein whose main function is to catalyse the reversible oxidative phosphorylation of glyceraldehyde- 3-phosphate, in conjunction with inorganic phosphate and nicotinamide adenine dinucleotide (NAD). This reaction is an important energy yielding step in carbohydrate metabolism.</li> <li>GAPDH has also been shown to translocate to the nucleus under a variety of stressors, most of which are associated with oxidative stress, whereby it mediates cell death. A further report has shown that GAPDH binds to several proteins that are responsible for neurodegenerative diseases, such as amyloid precursor protein and Huntingtin (<u>Hara <i>et</i></u></li> </ul>				

	<u>al. 2006</u> ).				
Western Blotting	MCA4739P is suitable for use as a loading control				
References	1. Koetzler, R. <i>et al.</i> (2009) Nitric oxide inhibits IFN regulatory factor 1 and nuclear factor- kappaB pathways in rhinovirus-infected epithelial cells. <u>J Allergy Clin Immunol. 124:</u> <u>551-7.</u>				
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	and chronic liver disease progression in Mdr2-/- mice. <u>PLoS One. 5: e15690.</u>				
	3. Zschemisch, N.H. et al. (2012) Zinc-finger nuclease mediated disruption of Rag1 in the				
	LEW/Ztm rat. BMC Immunol. 13: 60.				
	4. Zizza, P. <i>et al.</i> (2012) Phospholipase A2IVα regulates phagocytosis independent of its				
	enzymatic activity. J Biol Chem. 287: 16849-59.				
	5. Haller, S. <i>et al.</i> (2012) Expression profiles of metabolic enzymes and drug transporters				
	in the liver and along the intestine of beagle dogs. <u>Drug Metab Dispos. 40 (8): 1603-10.</u> 6. Agarwal, P. <i>et al.</i> (2013) Tumor suppressor gene p16/INK4A/CDKN2A-dependent				
	regulation into and out of the cell cycle in a spontaneous canine model of breast cancer. J				
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	transporter SLC1A1 and alters glutamate handling in non-transformed mammary cells.				
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	8. Suzuki, K. <i>et al.</i> (2016) Human Host Defense Cathelicidin Peptide LL-37 Enhances the				
	Lipopolysaccharide Uptake by Liver Sinusoidal Endothelial Cells without Cell Activation. J				
	Immunol. 196 (3): 1338-47.				
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	apoptosis but alleviates alcoholic hepatic steatosis in mice. Cell Death Dis. 8 (10): e3152.				
	10. Wang, S. <i>et al.</i> (2019) Tumor necrosis factor-inducible gene 6 reprograms hepatic				
	stellate cells into stem-like cells, which ameliorates liver damage in mouse. <u>Biomaterials.</u>				
	<u>219: 119375.</u>				
	11. Chen, C. <i>et al.</i> (2021) Activation of the Unfolded Protein Response (UPR) Is				
	Associated with Cholangiocellular Injury, Fibrosis and Carcinogenesis in an Experimental				
	Model of Fibropolycystic Liver Disease <u>Cancers. 14 (1): 78.</u>				
	12. Hihara, F. <i>et al.</i> (2022) <i>In Vitro.</i> Tumor Cell-Binding Assay to Select High-Binding				
	Antibody and Predict Therapy Response for Personalized <sup>64</sup> Cu-Intraperitoneal				
	Radioimmunotherapy against Peritoneal Dissemination of Pancreatic Cancer: A Feasibility Study. Int J Mol Sci. 23 (10): 5807.				
	13. Vucur, M. <i>et al.</i> (2023) Sublethal necroptosis signaling promotes inflammation and liver				
	cancer. Immunity. 56 (7): 1578-95.e8.				
	14. Kim, J. <i>et al.</i> (2023) Targeted Deletion of Thymosin Beta 4 in Hepatic Stellate Cells				
	Ameliorates Liver Fibrosis in a Transgenic Mouse Model. <u>Cells. 12 (12): 1658</u> .				
	15. Paluschinski, M. <i>et al.</i> (2023) Uncovering Novel Roles of miR-122 in the				
	Pathophysiology of the Liver: Potential Interaction with NRF1 and E2F4 Signaling.				
	<u>Cancers (Basel). 15 (16): 4129.</u>				
	16. Chen, C. et al. (2021) Platelet glycoprotein VI-dependent thrombus stabilization is				
	essential for the intraportal engraftment of pancreatic islets. Am J Transplant. 21 (6):				
	<u>2079-89.</u>				
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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.					
Avoid repeated freezing frost-free freezers is not				•	e antibody. Storage in		
Guarante	e	12 months f	rom date o				
Health Ai Informati	-	Material Saf <u>https://www.</u> 10094	•	:			
Regulato	ry	For researcl	n purposes				
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