

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 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 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	 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. 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> 				

	<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>				
	2. Latasa, M.U. et al. (2010) Oral methylthioadenosine administration attenuates fibrosis				
	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				
	Cell Biochem. 114 (6): 1355-63.				
	7. Beaudin, S. & Welsh, J. (2016) 1,25-Dihydroxyvitamin D induces the glutamate				
	transporter SLC1A1 and alters glutamate handling in non-transformed mammary cells.				
	Mol Cell Endocrinol. 424: 34-41.				
	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.				
	9. Hao, F. et al. (2017) Inhibition of Caspase-8 does not protect from alcohol-induced liver				
	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 ⁶⁴ 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>				
•					
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				
Iorth & South	Tel: +1 800 265 73 Fax: +1 919 878 3		Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739	•	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50	
	Email: antibody_sa	body_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.co	
To find a b	atch/lot specific	atasheet fo	r this produ	ict, please use our online 'M395566:220510'	search tool at: bio	o-rad-antibodies.com/datashe	
				Printed on 19 Jan 2024			

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint