

Datasheet: MCA4739

BATCH NUMBER 171154

Description:	MOUSE ANTI RABBIT GAPDH
Specificity:	GAPDH
Other names:	GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	6C5
Isotype:	IgG1
Quantity:	0.2 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	■			
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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Rabbit muscle GAPDH.
External Database Links	UniProt: P46406 Related reagents P04406 Related reagents P04797 Related reagents P16858 Related reagents P00355 Related reagents Entrez Gene: 100009074 GAPDH Related reagents 2597 GAPDH Related reagents 396823 GAPDH Related reagents 14433 Gapdh Related reagents 24383 Gapdh Related reagents
Synonyms	Gapd, GAPD
RRID	AB_1720065
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 (Hara et

References

1. Koetzler, R. *et al.* (2009) Nitric oxide inhibits IFN regulatory factor 1 and nuclear factor-kappaB pathways in rhinovirus-infected epithelial cells. [J Allergy Clin Immunol. 124: 551-7.](#)
2. Latasa, M.U. *et al.* (2010) Oral methylthioadenosine administration attenuates fibrosis and chronic liver disease progression in Mdr2^{-/-} mice. [PLoS One. 5: e15690.](#)
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. *et al.* (2012) Phospholipase A2IV α regulates phagocytosis independent of its enzymatic activity. [J Biol Chem. 287: 16849-59.](#)
5. Haller, S. *et al.* (2012) Expression profiles of metabolic enzymes and drug transporters in the liver and along the intestine of beagle dogs. [Drug Metab Dispos. 40 \(8\): 1603-10.](#)
6. Agarwal, P. *et al.* (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. *et al.* (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. *et al.* (2019) Tumor necrosis factor-inducible gene 6 reprograms hepatic stellate cells into stem-like cells, which ameliorates liver damage in mouse. [Biomaterials. 219: 119375.](#)
11. Chen, C. *et al.* (2021) Activation of the Unfolded Protein Response (UPR) Is Associated with Cholangiocellular Injury, Fibrosis and Carcinogenesis in an Experimental Model of Fibropolycystic Liver Disease [Cancers. 14 \(1\): 78.](#)
12. Hihara, F. *et al.* (2022) *In Vitro*. Tumor Cell-Binding Assay to Select High-Binding Antibody and Predict Therapy Response for Personalized ⁶⁴Cu-Intraperitoneal Radioimmunotherapy against Peritoneal Dissemination of Pancreatic Cancer: A Feasibility Study. [Int J Mol Sci. 23 \(10\): 5807.](#)
13. Vucur, M. *et al.* (2023) Sublethal necroptosis signaling promotes inflammation and liver cancer. [Immunity. 56 \(7\): 1578-95.e8.](#)
14. Kim, J. *et al.* (2023) Targeted Deletion of Thymosin Beta 4 in Hepatic Stellate Cells Ameliorates Liver Fibrosis in a Transgenic Mouse Model. [Cells. 12 \(12\): 1658.](#)
15. Paluschinski, M. *et al.* (2023) Uncovering Novel Roles of miR-122 in the Pathophysiology of the Liver: Potential Interaction with NRF1 and E2F4 Signaling. [Cancers \(Basel\). 15 \(16\): 4129.](#)
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 \(6\): 2079-89.](#)
17. Tokic, S. *et al.* (2024) The RhoA guanine exchange factor ABR: a glucose-sensitive mediator of actin reorganization in feto-placental arterial endothelial cells altered by gestational diabetes mellitus. [J Physiol. May 22 \[Epub ahead of print\].](#)

18. Drescher, H.K. *et al.* (2020) L-Selectin/CD62L is a Key Driver of Non-Alcoholic Steatohepatitis in Mice and Men. [Cells.9 \(5\): 1106.](#)
19. Guedes, J.P. *et al.* (2024) NatB Protects Procaspase-8 from UBR4-Mediated Degradation and Is Required for Full Induction of the Extrinsic Apoptosis Pathway. [Mol Cell Biol. : 1-14 \[Epub ahead of Print\].](#)
20. Kim, J. *et al.* (2021) sEVs from tonsil-derived mesenchymal stromal cells alleviate activation of hepatic stellate cells and liver fibrosis through miR-486-5p. [Mol Ther. 29 \(4\): 1471-86.](#)
21. Schneider, A.T. *et al.* (2025) A decision point between transdifferentiation and programmed cell death priming controls KRAS-dependent pancreatic cancer development. [Nat Commun. 16 \(1\): 1765.](#)
22. Kardash, E. *et al.* (2025) Pro-cognitive efficacy of Prospekta in a rat model of age-associated cognitive impairment. [BMC Neurosci. 26 \(1\): 35.](#)

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 and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA4739
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 (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M437682:250318'

