

Datasheet: AHP996

Description:	RABBIT ANTI GAPDH (C-TERMINAL)
Specificity:	GAPDH (C-TERMINAL)
Other names:	GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
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	-			0.5 - 1.0ug/ml

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, Rat 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	Antisera to human GAPDH (CT) were raised by repeated immunisation of rabbits with highly purified antigen.

Purified IaG	prepared by	∕ affinitv	chromatography.

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.02% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	A 16 amino acid peptide located near human GAPDH carboxy-terminus.
External Database Links	UniProt: P04406 Related reagents Entrez Gene: 2597 GAPDH Related reagents
Synonyms	GAPD
RRID	AB_609780
Specificity	Rabbit anti GAPDH (C-Terminal) antibody recognizes an epitope within the C-Terminal region (CT) of Glyceraldehyde-3-phosphate dehydrogenase (GAPDH), a glycolytic enzyme which plays a key role in energy production, and has also been implicated in numerous cellular processes. GAPDH is a homotetramer molecule consisting of four 36kDa subunits, constitutively expressed in most cells and tissues, and is responsible for the generation of energy during carbohydrate metabolism, catalysing the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate. GAPDH has a role as a multifunctional protein and is involved in critical nuclear pathways, apoptosis, membrane transport and fusion, DNA replication and repair and phosphotransferase activity. Furthermore, the ability of GAPDH to bind with high affinity to ß-amyloid precursor protein (Alzheimers disease) and selectively with CAG mutated proteins, including huntingtin (Huntingdons disease) and the androgen receptor (spinobulbar muscular atrophy), indicates roles for GAPDH in the pathogenesis of neurodegenerative diseases (De Santo et al. 2010).
Western Blotting References	AHP996 detects a band of approximately 37kDa in HeLa cell lysates. 1. De Santo, C. <i>et al.</i> (2010) Invariant NKT cells modulate the suppressive activity of IL-10-secreting neutrophils differentiated with serum amyloid A. Nat Immunol. 11 (11): 1039-46. 2. Weeke-Klimp, A. <i>et al.</i> (2010) Epicardium-derived cells enhance proliferation, cellular maturation and alignment of cardiomyocytes. J Mol Cell Cardiol. 49: 606-16.
	3. Deacon, K. and Knox, A.J. (2010) Endothelin-1 (ET-1) increases the expression of

remodeling genes in vascular smooth muscle through linked calcium and cAMP pathways: role of a phospholipase A(2)(cPLA(2))/cyclooxygenase-2 (COX-2)/prostacyclin receptor-dependent autocrine loop. J Biol Chem. 285: 25913-27.

4. Li, J. *et al.* (2020) Effect of Sheng-Jiang Powder on Gut Microbiota in High-Fat Diet-Induced NAFLD <u>Evidence-Based Complementary and Alternative Medicine</u>. 2020: 1-15.

Further Reading

- 1. Mazzola, J.L. & Sirover, M.A. (2001) Reduction of glyceraldehyde-3-phosphate dehydrogenase activity in Alzheimer's disease and in Huntington's disease fibroblasts. <u>J Neurochem. 76 (2): 442-9.</u>
- 2. Sirover, M.A. (2005) New nuclear functions of the glycolytic protein, glyceraldehyde-3-phosphate dehydrogenase, in mammalian cells. <u>J Cell Biochem. 95 (1): 45-52.</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 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/AHP996 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) FITC

Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

Sheep Anti Rabbit IgG (STAR35...) RPE

Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

Recommended Useful Reagents

TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M386239:210519'

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