

# Datasheet: AHP1064 BATCH NUMBER 164741

Description:	GOAT ANTI HUMAN 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			•	
Immunohistology - Frozen			•	
Immunohistology - Paraffin (1)	•			0.3ug/ml
ELISA	•			1/2000
Immunoprecipitation			•	
Western Blotting	•			0.01 - 0.03ug/ml
Functional Assays			•	

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

# (1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Pig, Rat Based on sequence similarity, is expected to react with:Dog
	N.B. Antibody reactivity and working conditions may vary between speci

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	further information.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to human GAPDH (CT) were raised by repeated immunisations of goat with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	TRIS buffered saline
Preservative Stabilisers	<ul><li>0.02% Sodium Azide (NaN<sub>3</sub>)</li><li>0.5% Bovine Serum Albumin</li></ul>
Approx. Protein Concentrations	IgG concentration 0.5mg/ml
Immunogen	Peptide sequence C-HQVVSSDFNSDT corresponding to the C-terminal region of GAPDI (NP_002037.2).
External Database Links	UniProt:  P04406 Related reagents  Entrez Gene:  2597 GAPDH Related reagents
Synonyms	GAPD
RRID	AB_808591
Specificity	Goat anti Human GAPDH antibody recognizes an epitope within the C-terminal (CT) region of 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 translocates to the nucleus under a variety of stressors, most of which are associated with oxidative stress, whereby it mediates cell death ( <u>Dastoor et al. 2001</u> ). GAPDH binds to several proteins that are responsible for neurodegenerative diseases, such as amyloid precursor protein and Huntingtin ( <u>Burke et al. 1996</u> ).
Histology Positive Control Tissue	Human tonsil
Western Blotting	AHP1064 detects a band of approximately 35kDa in human tonsil, mouse spleen and HeLa cell lysates.
References	1. Hara, M.R. et al. (2006) GAPDH as a sensor of NO stress. Biochim Biophys Acta. 176.

(5): 502-9.

2. Mazzola, J.L. & Sirover, M.A. (2001) Reduction of glyceraldehyde-3-phosphate
dehydrogenase activity in Alzheimer's disease and in Huntington's disease fibroblasts. $\underline{J}$
Neurochem. 76 (2): 442-9.

3. Wang H *et al.* (2013) Hypoxic preconditioning alleviates ethanol neurotoxicity: the involvement of autophagy. Neurotox Res. 24 (4): 472-7.

#### **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 #10058 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP1064">https://www.bio-rad-antibodies.com/SDS/AHP1064</a> 10058
Regulatory	For research purposes only

# Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Goat IgG (Fc) (STAR122...) FITC, HRP

### **Recommended Useful Reagents**

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

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

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

Email: antibody\_sales\_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M384139:210513'

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