

## Datasheet: HCA272

<b>Description:</b>	HUMAN ANTI GAPDH
<b>Specificity:</b>	GAPDH
<b>Other names:</b>	GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD22549_hlgG1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Immunoprecipitation	▪			
Western Blotting	▪			1/50 - 1/800

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.

<b>Target Species</b>	Human
<b>Product Form</b>	Human IgG1 antibody selected from the HuCAL phage display library and expressed in a human cell line - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<b>Immunogen</b>	Recombinant human GAPDH

**External Database  
Links**

**UniProt:**

[P04406](#)    [Related reagents](#)

**Entrez Gene:**

[2597](#)    GAPDH    [Related reagents](#)

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**Synonyms**

GAPD

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**Specificity**

**Human anti GAPDH antibody, clone AbD22549\_hlgG1** recognizes human glyceraldehyde 3-phosphate dehydrogenase (GAPDH), a 335 amino acid multifunctional protein. The main function of GAPDH is to catalyse the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate, in conjunction with inorganic phosphate and nicotinamide adenine dinucleotide (NAD). It is a major glycolytic enzyme within the cytosol and is also involved in a number of intracellular processes, including membrane fusion, microtubule bundling, phosphotransferase, DNA replication and DNA repair. It 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.

GAPDH has been shown to bind to several proteins that are responsible for neurodegenerative diseases, such as amyloid precursor protein and huntingtin ([Burke et al. 1996](#)).

Since GAPDH is constitutively expressed in almost all tissues at high levels, this antibody is recommended for use as a loading control for western blotting.

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**Affinity**

The intrinsic affinity of the monovalent form of Human anti GAPDH antibody, clone AbD22549 is  $K_D = 2$  nM as measured by real time, label free molecular interaction analysis on immobilized GAPDH.

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**Western Blotting**

Anti GAPDH antibody detects a band of approximately 36 kDa in Jurkat cell lysate under reducing conditions.

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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 and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10094 available at:  
10094: <https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf>

**Licensed Use** For *in vitro* research purposes only, unless otherwise specified in writing by Bio-Rad.

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**Regulatory** For research purposes only

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**Technical Advice** Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#).

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## Related Products

### Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

[GOAT ANTI HUMAN IgG F\(ab'\)<sub>2</sub>:HRP \(STAR126P\)](#)

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