# Datasheet: HCA272

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| **Description:** | HUMAN ANTI GAPDH |
| **Specificity:** | GAPDH |
| **Other names:** | GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | AbD22549_hIgG1 |
| **Isotype:** | IgG1 |
| **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 |
|---|---|---|---|---|
| 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.

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| **Target Species** | Human |
| **Product Form** | Human IgG1 antibody selected from the HuCAL® phage display library and expressed in a human cell line - liquid |
| **Preparation** | Purified IgG prepared by affinity chromatography on Protein A |
| **Buffer Solution** | Phosphate buffered saline |
| **Preservative Stabilisers** | 0.01% Thiomersal |
| **Approx. Protein Concentrations** | IgG concentration 0.5 mg/ml |
| **Immunogen** | Recombinant human GAPDH |
| **External Database Links** | **UniProt:** P04406 Related reagents<br>**Entrez Gene:** |

2597 GAPDH Related reagents

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| **Synonyms** | GAPD |
| **Specificity** | **Human anti GAPDH antibody, clone AbD22549_hIgG1** 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.<br><br>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).<br><br>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. |
| **Affinity** | The monovalent intrinsic affinity of AbD22549 was measured as $K_D$ = 2 nM by real time, label free molecular interaction analysis on immobilized HSPA4 |
| **Western Blotting** | Anti GAPDH antibody detects a band of approximately 36 kDa in Jurkat cell lysate under reducing conditions |
| **Storage** | Store at +4$^{o}$C or at -20$^{o}$C if preferred.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. |
| **Shelf Life** | 12 months from date of despatch |
| **Acknowledgements** | Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents.<br>This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany. |
| **Health And Safety Information** | Material Safety Datasheet documentation #10094 available at:<br>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. |
| **Regulatory** | For research purposes only |
| **Technical Advice** | Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual |

# Related Products

## Recommended Useful Reagents

TidyBlot™ WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)
GOAT ANTI HUMAN IgG F(ab')2:HRP (STAR126P)

'M305134:170421'

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