

**GAPDH Antibody**  
Purified Mouse Monoclonal Antibody (Mab)  
Catalog # AW5681

**Specification**

**GAPDH Antibody - Product Information**

Application	<b>WB,E</b>
Primary Accession	<a href="#">P04406</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Calculated MW	<b>H=36;R=36 KDa</b>
Isotype	<b>IgG1,k</b>
Antigen Source	<b>HUMAN</b>

**GAPDH Antibody - Additional Information**

Gene ID 2597

**Antigen Region**  
43-335

**Other Names**  
Glyceraldehyde-3-phosphate dehydrogenase, GAPDH, 1.2.1.12, Peptidyl-cysteine S-nitrosylase GAPDH, 2.6.99.-, GAPDH, GAPD

**Dilution**  
WB~~1:10000

**Target/Specificity**  
This GAPDH antibody is generated from a mouse immunized with a recombinant protein between 43-335 amino acids from human GAPDH.

**Storage**  
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

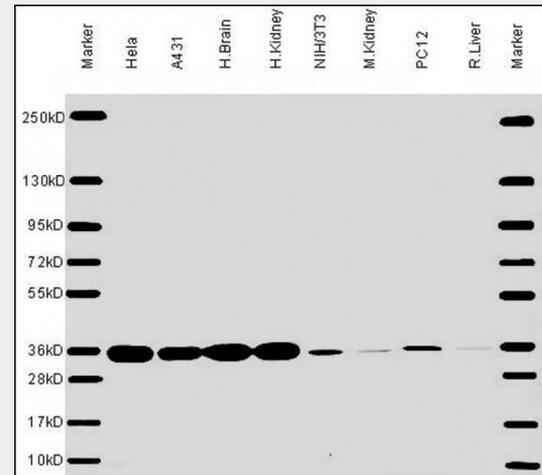
**Precautions**  
GAPDH Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GAPDH Antibody - Protein Information**

**Name** GAPDH

**Synonyms** GAPD

**Function**  
Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities,



All lanes : Anti-GAPDH Antibody at 1:10000 dilution Lane 1: HeLa whole cell lysate Lane 2: A431 whole cell lysate Lane 3: human brain lysate Lane 4: human kidney lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: mouse kidney lysate Lane 7: PC12 whole cell lysate Lane 8: rat Liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFD/MTBST.

**GAPDH Antibody - Background**

Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC. Modulates the organization and assembly of the cytoskeleton. Facilitates the CHP1-dependent microtubule and membrane associations through its ability to stimulate the binding of CHP1 to microtubules (By similarity). Glyceraldehyde-3-phosphate dehydrogenase is a key enzyme in glycolysis that catalyzes the first step of the pathway by converting D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D- glyceroyl phosphate. Component of the GAIT (gamma interferon- activated inhibitor of translation) complex which mediates

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#### **Cellular Location**

Cytoplasm, cytosol. Nucleus. Cytoplasm, perinuclear region. Membrane. Cytoplasm, cytoskeleton. Note=Translocates to the nucleus following S- nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions.

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#### **GAPDH Antibody - References**

Hanauer A.,et al.EMBO J. 3:2627-2633(1984).  
Arcari P.,et al.Nucleic Acids Res. 12:9179-9189(1984).  
Tso J.Y.,et al.Nucleic Acids Res. 13:2485-2502(1985).  
Tokunaga K.,et al.Cancer Res. 47:5616-5619(1987).  
Allen R.W.,et al.J. Biol. Chem. 262:649-653(1987).

#### **GAPDH Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **GAPDH Antibody - Citations**

- [PTPN1 promotes the progression of glioma by activating the MAPK/ERK and PI3K/AKT pathways and is associated with poor patient survival.](#)