

# **GAPDH Antibody, HRP Conjugate**

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8501b

# **Specification**

# **GAPDH Antibody, HRP Conjugate - Product Information**

Application WB,E
Primary Accession P04406
Reactivity Human
Host Mouse
Clonality monoclonal
Isotype IgG1

# **GAPDH Antibody, HRP Conjugate - Additional Information**

**Gene ID 2597** 

**Other Names** 

**GAPD** 

# Target/Specificity

This GAPDH antibody is generated from a mouse immunized with a recombinant protein of human GAPDH.

### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

### **Format**

Purified monoclonal antibody conjugated with HRP supplied in PBS with 0.05% (W/V) Proclin 300. This antibody is purified through a protein G column, followed by size-exclusion - Membrane filtration purification.

# **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, HRP Conjugate is for research use only and not for use in diagnostic or therapeutic procedures.

# **GAPDH Antibody, HRP Conjugate - Protein Information**

Name GAPDH {ECO:0000303|PubMed:2987855, ECO:0000312|HGNC:HGNC:4141}

**Function** Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively (PubMed: 11724794, PubMed: 3170585). 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 (PubMed:11724794, PubMed:3170585). Modulates the organization and assembly of the cytoskeleton (By similarity). Facilitates the CHP1- dependent microtubule and membrane associations through its ability to stimulate the binding of CHP1 to microtubules (By similarity). Component of the GAIT (gamma interferon-activated inhibitor of translation) complex which mediates interferon-gamma-induced transcript-selective translation inhibition in inflammation processes (PubMed:23071094). Upon interferon-gamma treatment assembles into the GAIT complex which binds to stem loop-containing GAIT elements in the 3'-UTR of diverse inflammatory mRNAs (such as ceruplasmin) and suppresses their translation (PubMed:23071094). Also plays a role in innate immunity by promoting TNF-induced NF-kappa-B activation and type I interferon production, via interaction with TRAF2 and TRAF3, respectively (PubMed:23332158, PubMed:27387501). Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis (By similarity). Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC (By similarity).

#### **Cellular Location**

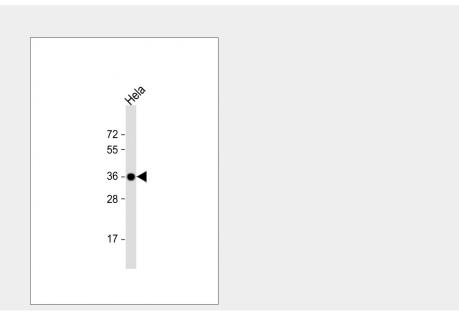
Cytoplasm, cytosol. Nucleus {ECO:0000250|UniProtKB:P04797}. Cytoplasm, perinuclear region. Membrane Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P04797} Note=Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions (PubMed:12829261) {ECO:0000250|UniProtKB:P04797, ECO:0000269|PubMed:12829261}

# **GAPDH Antibody, HRP Conjugate - Protocols**

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

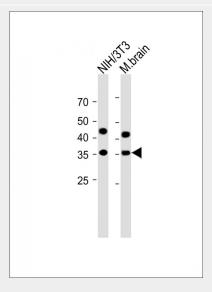
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **GAPDH Antibody, HRP Conjugate - Images**





Anti-GAPDH Antibody, HRP Conjugate at 1:40000 dilution + Hela whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes: Anti-GAPDH Antibody(conjugated HRP) at 1:1000 dilution Lane 1:NIH/3T3 whole cell lysate Lane 1:mouse brain lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 36kDa Blocking/Dilution buffer: 5% NFDM/TBST.