

## Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated

**Catalog # ABO13099** 

## **Specification**

## Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated - Product Information

Application WB
Primary Accession P04406
Host Rabbit Isotype Rabbit IgG

Reactivity Rat, Human, Mouse, Monkey

Clonality Monoclonal Format Liquid

**Description** 

Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated . Tested in WB application. This antibody reacts with Human, Monkey, Mouse, Rat.

## Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated - Additional Information

#### **Gene ID 2597**

#### **Other Names**

Glyceraldehyde-3-phosphate dehydrogenase, GAPDH, 1.2.1.12, Peptidyl-cysteine S-nitrosylase GAPDH, 2.6.99.-, GAPDH {ECO:0000303|PubMed:2987855, ECO:0000312|HGNC:HGNC:4141}

## Calculated MW 36053 MW KDa

# **Application Details** WB 1:5000-1:20000

### **Subcellular Localization**

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

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### **Immunogen**

A synthesized peptide derived from human GAPDH (HRP conjugated)

#### **Purification**

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.



## Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated - 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:<a href="http://www.uniprot.org/citations/11724794" target=" blank">11724794</a>, PubMed:<a href="http://www.uniprot.org/citations/3170585" target=" blank">3170585</a>). 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:<a href="http://www.uniprot.org/citations/11724794" target=" blank">11724794</a>, PubMed:<a href="http://www.uniprot.org/citations/3170585" target=" blank">3170585</a>). 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: <a href="http://www.uniprot.org/citations/23071094" target="blank">23071094</a>). 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:<a href="http://www.uniprot.org/citations/23071094" target=" blank">23071094</a>). 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: <a href="http://www.uniprot.org/citations/23332158" target=" blank">23332158</a>, PubMed:<a href="http://www.uniprot.org/citations/27387501" target="blank">27387501</a>). 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**

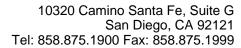
Cytoplasm, cytosol. Nucleus {ECO:0000250|UniProtKB:P04797}. Cytoplasm, perinuclear region. Membrane Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P04797} Note=Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity).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

## Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated - Protocols

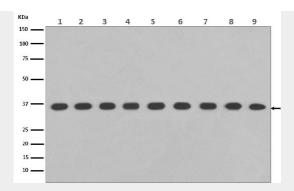
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-GAPDH Rabbit Monoclonal Antibody, HRP Conjugated - Images







Western blot analysis of GAPDH expression in (1) Jurkat cell lysate; (2) A375 cell lysate; (3) Human hippocampus lysate; (4) Human fetal liver lysate; (5) COS-1 cell lysate; (6) Raw264.7 cell lysate; (7) Mouse kidney lysate; (8) PC-12 cell lysate; (9) Rat brain lysate