

### Anti-GAPDH Antibody (aa120-320, clone ABM22C5)

Mouse Anti Human Monoclonal Antibody Catalog # ALS18302

### **Specification**

# Anti-GAPDH Antibody (aa120-320, clone ABM22C5) - Product Information

Application WB, IHC-P Primary Accession P04406

Predicted Human, Mouse

Host Mouse
Clonality Monoclonal
Isotype IgG1,k
Calculated MW 36053

Dilution WB~~1:1000

IHC-P~~N/A

# Anti-GAPDH Antibody (aa120-320, clone ABM22C5) - Additional Information

**Gene ID 2597** 

Alias Symbol GAPDH

**Other Names** 

GAPDH, A1 40 kd subunit, Activator 1 40 kd subunit, G3PD, GAPD, G3pdh, Rfc40, Rf-c 40 kd subunit

**Reconstitution & Storage** 

**Purified** 

#### **Precautions**

Anti-GAPDH Antibody (aa120-320, clone ABM22C5) is for research use only and not for use in diagnostic or therapeutic procedures.

### Anti-GAPDH Antibody (aa120-320, clone ABM22C5) - Protein Information

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

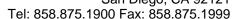
### **Function**

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 Antibody (aa120-320, clone ABM22C5) - 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 Antibody (aa120-320, clone ABM22C5) - Images