

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

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:3170585, PubMed:11724794).

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:3170585, PubMed:11724794). 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



Tel: 858.875.1900 Fax: 858.875.1999

(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}

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