

Anti-GAPDH Antibody-HRP labled

Mouse monoclonal antibody to GAPDH Catalog # AP61581

Specification

Anti-GAPDH Antibody-HRP labled - Product Information

Application WB
Primary Accession P04406
Other Accession P16858

Reactivity Human, Mouse, Rat, Rabbit, Monkey, Pig,

Chicken, SARS, Dog

Host Mouse
Clonality Monoclonal
Calculated MW 36053

Anti-GAPDH Antibody-HRP labled - Additional Information

Gene ID 2597

Other Names

GAPD; Glyceraldehyde-3-phosphate dehydrogenase; GAPDH; Peptidyl-cysteine S-nitrosylase GAPDH

Target/Specificity

Recognizes endogenous levels of GAPDH protein.

Dilution

WB~~WB (1/2000 - 1/5000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-GAPDH Antibody-HRP labled - 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: <a href="http://www.uniprot.org/citations/11724794"



target=" blank">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

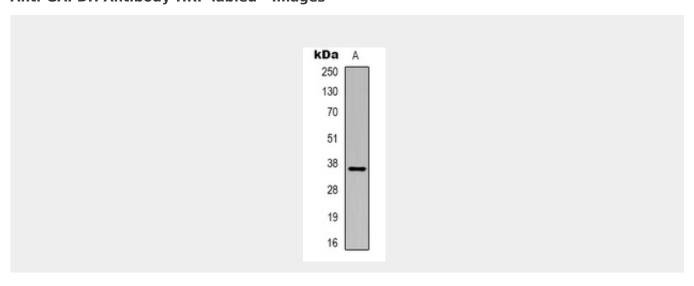
Cytoplasm, cytosol. Nucleus {ECO:0000250|UniProtKB:P04797}. Cytoplasm, perinuclear region. Membrane Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P04797} Note=Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity).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

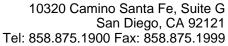
Anti-GAPDH Antibody-HRP labled - Protocols

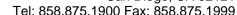
Provided below are standard protocols that you may find useful for product applications.

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

Anti-GAPDH Antibody-HRP labled - Images









Western blot analysis of GAPDH-HRP labled expression in Hela (A) whole cell lysates.

Anti-GAPDH Antibody-HRP labled - Background

KLH-conjugated synthetic peptide encompassing a sequence of human GAPDH. The exact sequence is proprietary.