

Anti-GAPDH Antibody (clone 1D4)
Mouse Anti Human Monoclonal Antibody
Catalog # ALS18146**Specification****Anti-GAPDH Antibody (clone 1D4) - Product Information**

Application	WB, IHC-P, IF, ICC
Primary Accession	P04406
Predicted	Human, Mouse, Rat, Pig, Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	IgM,k
Calculated MW	36053
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Anti-GAPDH Antibody (clone 1D4) - 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

Target/Specificity

Clone 1D4 recognizes GAPDH specifically both in western blots and in immunocytochemical experiments. On blots clone 1D4 reveals a prominent ~38kDa band, and on cells in tissue culture the antibody stains in a punctate cytoplasmic fashion. clone 1D4 i ...

Reconstitution & Storage

Tissue culture supernatant

Precautions

Anti-GAPDH Antibody (clone 1D4) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-GAPDH Antibody (clone 1D4) - Protein Information**Name** GAPDH {ECO:0000303|PubMed:2987855, ECO:0000312|HGNC:HGNC:4141}**Function**

Catalyzes the conversion of D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D-glyceroyl phosphate in glycolysis and the reverse reaction in gluconeogenesis (PubMed:11724794, PubMed:3170585). Also shows

nitrosylase activity, thereby playing a role in nuclear functions (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}

Anti-GAPDH Antibody (clone 1D4) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GAPDH Antibody (clone 1D4) - Images