

GAPDH Antibody, HRP Conjugate

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8501b

Product Information

Application	WB, E
Primary Accession	<u>P04406</u>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1
Clone Names	1653CT401.3.33
Calculated MW	36053

Additional Information

Gene ID	2597
Other Names	GAPD
Target/Specificity	This GAPDH antibody is generated from a mouse immunized with a recombinant protein of human GAPDH.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody conjugated with HRP supplied in PBS with 0.05% (W/V) Proclin 300. This antibody is purified through a protein G column, followed by size-exclusion - Membrane filtration purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GAPDH Antibody, HRP Conjugate is for research use only and not for use in diagnostic or therapeutic procedures.

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: <u>11724794</u> , PubMed: <u>3170585</u>). 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: <u>11724794</u> , PubMed: <u>3170585</u>). 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}

Images



Anti-GAPDH Antibody, HRP Conjugate at 1:40000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.