

GAPDH Antibody (C-term R248)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7873b

Specification

GAPDH Antibody (C-term R248) - Product Information

Application	IF, WB, IHC-P, FC,E
Primary Accession	P04406
Other Accession	P04797 , P00355 , P16858 , P00356
Reactivity Predicted	Human Chicken, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	36053
Antigen Region	233-259

GAPDH Antibody (C-term R248) - Additional Information

Gene ID 2597

Other Names

Glyceraldehyde-3-phosphate dehydrogenase,
GAPDH, Peptidyl-cysteine S-nitrosylase
GAPDH, 2699-, GAPDH, GAPD

Target/Specificity

This GAPDH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 233-259 amino acids from the C-terminal region of human GAPDH.

Dilution

IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

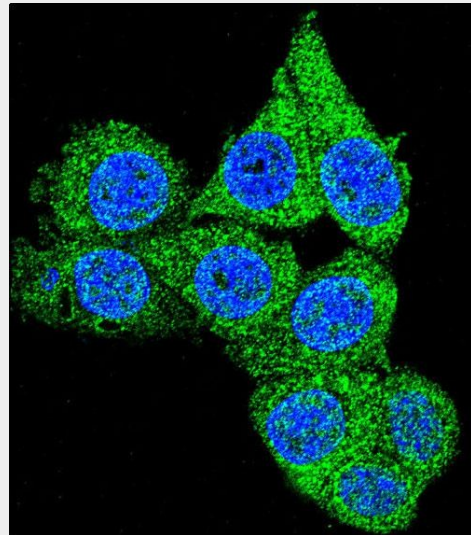
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

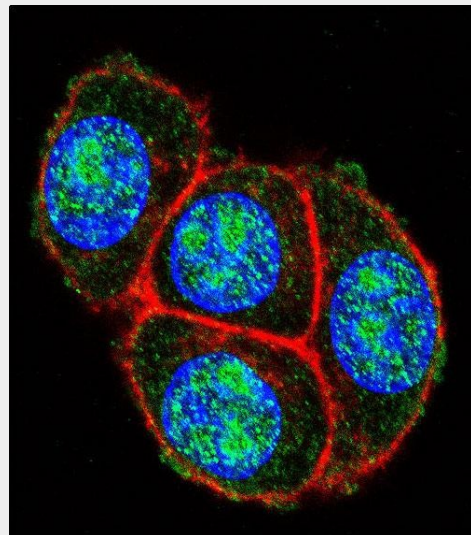
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GAPDH Antibody (C-term R248) is for research use only and not for use in



Confocal immunofluorescent analysis of GAPDH Antibody (C-term R248)(Cat#AP7873b) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Confocal immunofluorescent analysis of GAPDH Antibody (C-term R248)(Cat#AP7873b) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

diagnostic or therapeutic procedures.

GAPDH Antibody (C-term R248) - Protein Information

Name GAPDH

Synonyms GAPD

Function

Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC. Modulates the organization and assembly of the cytoskeleton. Facilitates the CHP1-dependent microtubule and membrane associations through its ability to stimulate the binding of CHP1 to microtubules (By similarity). 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. Component of the GAIT (gamma interferon- activated inhibitor of translation) complex which mediates interferon- gamma-induced transcript-selective translation inhibition in inflammation processes. 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.

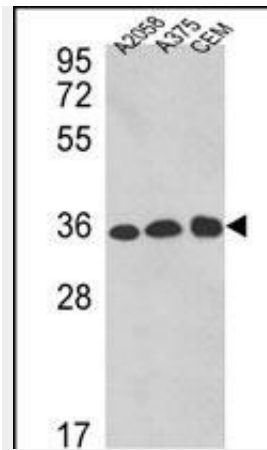
Cellular Location

Cytoplasm, cytosol. Nucleus. Cytoplasm, perinuclear region. Membrane Cytoplasm, cytoskeleton. Note=Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions.

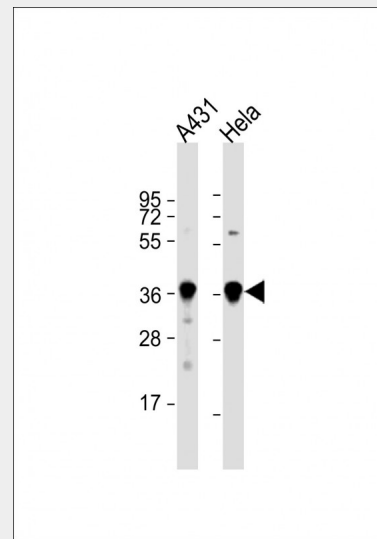
GAPDH Antibody (C-term R248) - Protocols

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

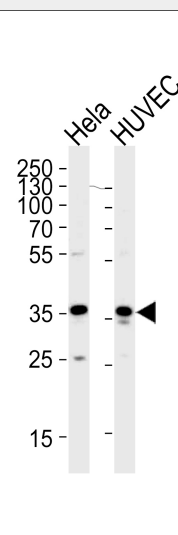
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



Western blot analysis of GAPDH Antibody (C-term R248) (Cat.#AP7873b) in A2058, A375, CEM cell line lysates (35ug/lane). GAPDH (arrow) was detected using the purified Pab.

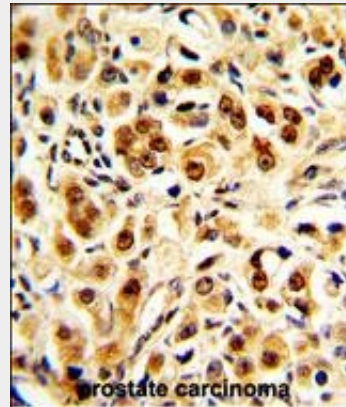


All lanes : Anti-GAPDH Antibody (C-term R248) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

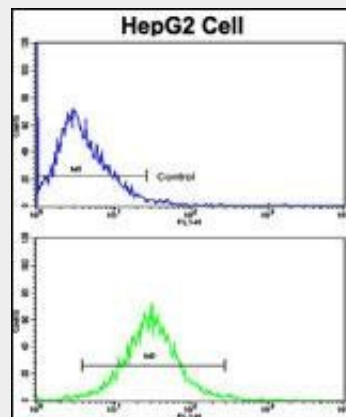


Western blot analysis of lysates from HeLa, HUVEC cell line (from left to right), using

GAPDH Antibody (C-term R248)(Cat. #AP7873b).AP7873b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human prostate carcinoma with GAPDH Antibody (C-term R248), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of HepG2 cells using GAPDH Antibody (C-term R248)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

GAPDH Antibody (C-term R248) - Background

GAPDH catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The enzyme exists as a tetramer of identical chains.

GAPDH Antibody (C-term R248) - References

Azam,S., J. Biol. Chem. 283 (45), 30632-30641 (2008)

Lu,J., Biosci. Biotechnol. Biochem. 72 (9),
2432-2435 (2008)
Zhou,Y., Mol. Cancer Res. 6 (8), 1375-1384
(2008)

GAPDH Antibody (C-term R248) - Citations

- [An ancient germ cell-specific RNA-binding protein protects the germline from cryptic splice site poisoning.](#)
- [Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and apoptosis of colorectal cancer cells.](#)
- [Metalloproteases meprin- \$\alpha\$ \(MEP1A\) is a prognostic biomarker and promotes proliferation and invasion of colorectal cancer.](#)