

**Anti-GAPDH Rabbit Monoclonal Antibody**  
Catalog # ABO13568**Specification****Anti-GAPDH Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	<a href="#">P04406</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-GAPDH Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-GAPDH Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 2597

**Other Names**

Glyceraldehyde-3-phosphate dehydrogenase, GAPDH, 1.2.1.12, Peptidyl-cysteine S-nitrosylase GAPDH, 2.6.99.-, GAPDH {ECO:0000303|PubMed:2987855, ECO:0000312|HGNC:HGNC:4141}

**Calculated MW**

36053 MW KDa

**Application Details**

WB 1:5000-1:50000<br>IHC 1:100-1:500<br>ICC/IF 1:100-1:250<br>IP 1:50<br>FC 1:50

**Subcellular Localization**

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

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human GAPDH

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## Anti-GAPDH Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/11724794" target="\_blank">11724794</a>, PubMed:<a href="http://www.uniprot.org/citations/3170585" target="\_blank">3170585</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/3170585" target="\_blank">3170585</a>). 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:<a href="http://www.uniprot.org/citations/23071094" target="\_blank">23071094</a>). 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:<a href="http://www.uniprot.org/citations/23071094" target="\_blank">23071094</a>). 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:<a href="http://www.uniprot.org/citations/23332158" target="\_blank">23332158</a>, PubMed:<a href="http://www.uniprot.org/citations/27387501" target="\_blank">27387501</a>). 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

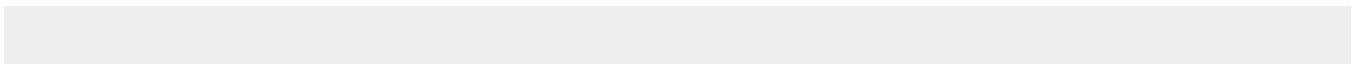
Cytoplasm, cytosol. Nucleus {ECO:0000250|UniProtKB:P04797}. Cytoplasm, perinuclear region. Membrane Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P04797} Note=Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity).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

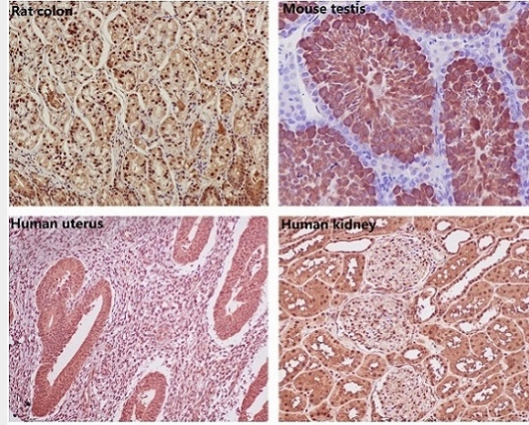
## Anti-GAPDH Rabbit Monoclonal Antibody - Protocols

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

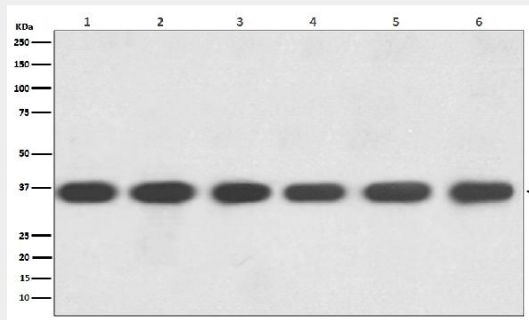
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-GAPDH Rabbit Monoclonal Antibody - Images

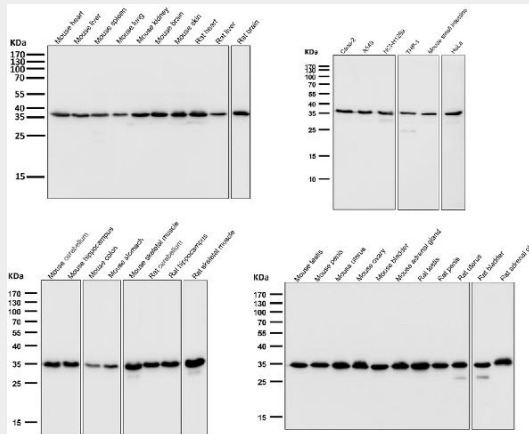




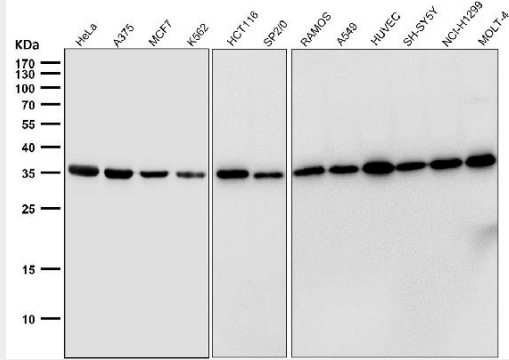
Immunohistochemical analysis of paraffin-embedded (1) Rat colon; (2) Mouse testis; (3) Human uterus; (4) Human kidney, using GAPDH Antibody.



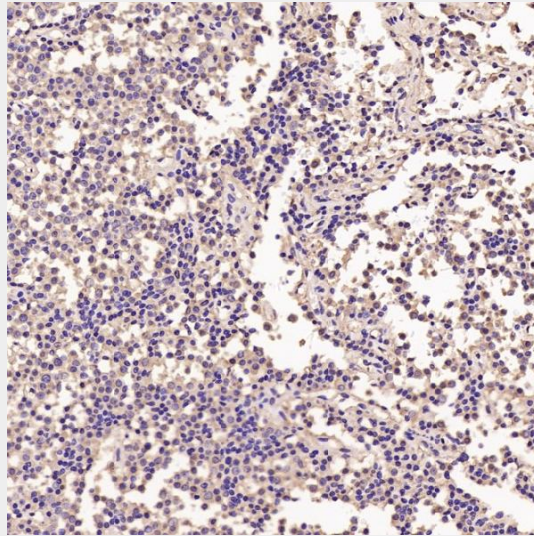
Western blot analysis of GAPDH expression in (1) Hela cell lysate; (2) Jurkat cell lysate; (3) Mouse kidney lysate; (4) Mouse spleen lysate; (5) RAW 264.7 cell lysate; (6) Rat brain lysate with GAPDH Antibody.



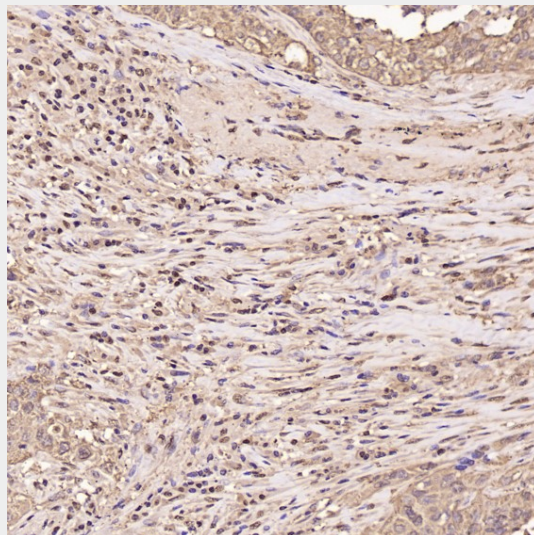
All lanes use GAPDH Antibody at 1:50000 dilution for 1 hour at room temperature.



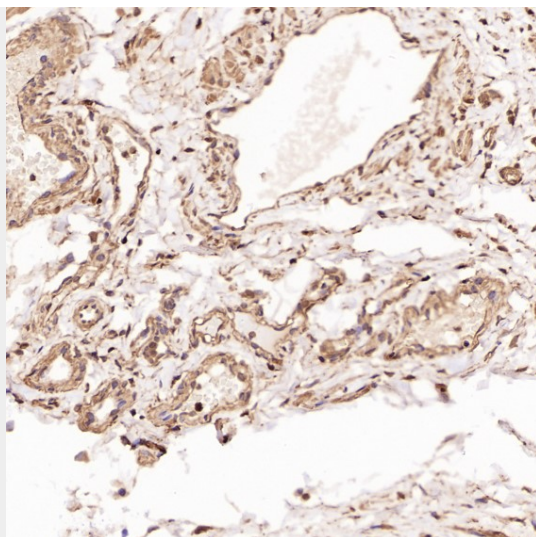
All lanes use GAPDH Antibody at 1:50000 dilution for 1 hour at room temperature.



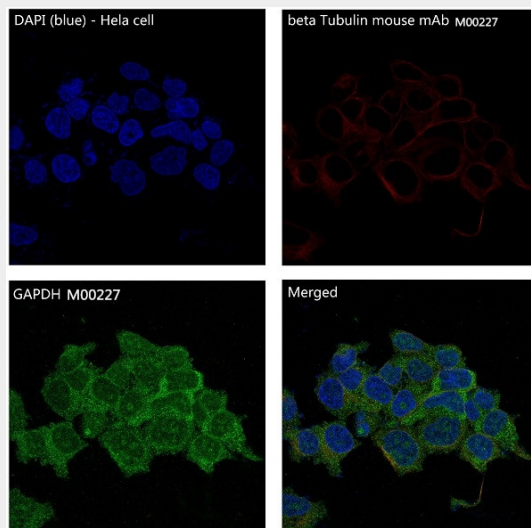
Immunohistochemical analysis of paraffin-embedded Human pituitary adenoma, using the Antibody at 1:400 dilution.



Immunohistochemical analysis of paraffin-embedded Human squamous carcinoma, using the Antibody at 1:400 dilution.



Immunohistochemical analysis of paraffin-embedded Human testis cancer, using the Antibody at 1:400 dilution.



Immunofluorescent analysis of HeLa cells, using GAPDH Antibody.