

Product datasheet for **TA336630**

GAPDH Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:2000-1:10000, IF: 1:50-1:200, IHC: 1:100-1:500, IHC-P: 1:100-1:500
Reactivity:	Human, Mouse, Rat, Primate
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The epitope recognized by this antibody maps to a region between residues 150 and 200 of human GAPDH using the numbering given in entry NP_002037.2 (GeneID 2597).
Formulation:	Tris-citrate/phosphate, pH 7, 0.1% Sodium azide. Store at 4C. Do not freeze.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	38 kDa
Gene Name:	glyceraldehyde-3-phosphate dehydrogenase
Database Link:	NP_002037 Entrez Gene 14433 Mouse Entrez Gene 24383 Rat Entrez Gene 2597 Human P04406



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Background:

GAPDH (glyceraldehyde-3-phosphate dehydrogenase or GAPD) is a key enzyme in glycolytic pathway, wherein it catalyzes the first step by converting D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D-glyceroyl phosphate. It localizes mainly in the cytoplasm from where it translocates to nucleus following S-nitrosylation and interaction with SIAH1. Nuclear GAPDH implicates in transcription, RNA transport, DNA replication and apoptosis, via its nitrosylase activity which mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2, PRKDC etc. GAPDH also regulates the organization/assembly of cytoskeleton and facilitates CHP1-dependent microtubule - membrane associations. It is a component of GAIT (gamma interferon-activated inhibitor of translation) complex which mediates IFN-gamma-induced transcript-selective translation inhibition in inflammation. Because of its expression as housekeeping protein in most cell types, GAPDH is often used as a control molecule in various genes expression studies, however, recent evidence has shown the association of its altered expression with neurodegenerative pathologies such as Huntington disease, Alzheimer's disease etc., and elevated GAPDH mRNA/protein expression levels have been seen in pancreatic, lung and prostate cancers.

Synonyms:

G3PD; GAPD; HEL-S-162eP

Note:

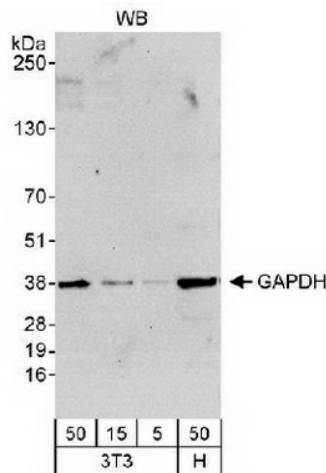
This GAPDH antibody is useful for Western Blot, Immunocytochemistry/Immunofluorescence and Immunohistochemistry-Paraffin applications. For IHC, antigen retrieval with citrate buffer pH6.0 is recommended for formalin fixed paraffin embedded tissue sections.

Protein Families:

ES Cell Differentiation/IPS

Protein Pathways:

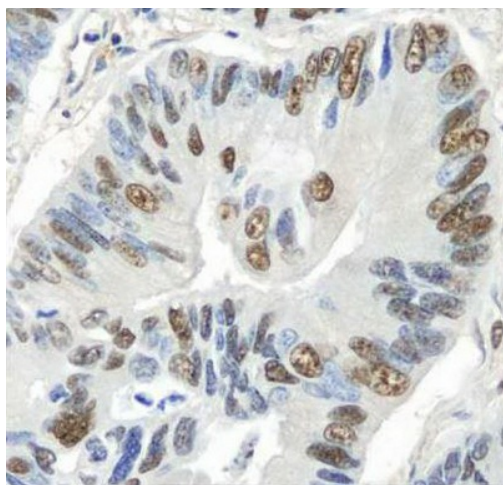
Alzheimer's disease, Glycolysis / Gluconeogenesis, Metabolic pathways

Product images:


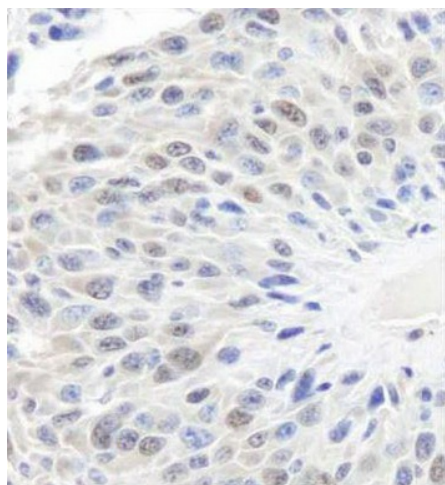
Western Blot: GAPDH Antibody TA336630 - Detection of Human and Mouse GAPDH by Western Blot. Samples: Whole cell lysate from mouse NIH3T3 (5, 15 and 50 ug) and human HeLa (H; 50 ug) cells. Antibody: Affinity purified rabbit anti-GAPDH antibody used at 0.



Western Blot: GAPDH Antibody TA336630 - Mouse DRG stained at 1:2000 dilution. Image provided by verified customer review.



Immunohistochemistry-Paraffin: GAPDH Antibody TA336630 - IHC-P detection of GAPDH in formalin fixed paraffin embedded section of human lung carcinoma using TA336630 at a dilution of 1:200.



Immunohistochemistry-Paraffin: GAPDH Antibody TA336630 - IHC-P detection of GAPDH in formalin fixed paraffin embedded section of mouse squamous cell carcinoma using TA336630 at a dilution of 1:200.



Immunocytochemistry/Immunofluorescence: GAPDH Antibody TA336630 - GAPDH detection in HeLa cells with ICC-IF application using TA336630, visualized with DyLight Fluor 488.