



# GAPDH Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03502
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Rabbit;Ch;Mk;sheep;X;Fish;Chicken;Guinea pig;Guinea pig;Duck
<b>Applications</b>	WB;IHC;IF
<b>Gene Name</b>	GAPDH
<b>Protein Name</b>	Glyceraldehyde-3-phosphate dehydrogenase
<b>Immunogen</b>	Recombinant Protein of GAPDH
<b>Specificity</b>	The antibody detects endogenous GAPDH protein.
<b>Formulation</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB: 1:5000 IHC: 1:200. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	GAPDH; GAPD; CDABP0047; OK/SW-cl.12; Glyceraldehyde-3-phosphate dehydrogenase; GAPDH; Peptidyl-cysteine S-nitrosylase GAPDH
<b>Observed Band</b>	37kD
<b>Cell Pathway</b>	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 (PubMed:12829261). .
<b>Tissue Specificity</b>	Astrocytoma,Brain,Cajal-Retzius cell,Colon adenocarcinoma,Epitheliu
<b>Function</b>	catalytic activity:D-glyceraldehyde 3-phosphate + phosphate + NAD(+) = 3-phospho-D-glyceroyl phosphate + NADH.;function:Independent of its glycolytic activity it is also involved in membrane trafficking in the early secretory pathway.;online information:Glyceraldehyde 3-phosphate dehydrogenase entry,pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1.;pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.;PTM:Reversible S-nitrosylation of Cys-152 inhibits enzymatic activity and increases endogenous ADP-ribosylation, which inhibits the enzyme in a non-reversible manner. The latter modification is more likely to be a pathophysiological event associated with inhibition of gluconeogenesis.;sequence caution:Differs quite extensively.;similarity:Belongs to the



## glyceraldehyde-3-phosphate dehydrogenase fami

### Background

glyceraldehyde-3-phosphate dehydrogenase(GAPDH) Homo sapiens This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene 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 encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against *E. coli*, *P. aeruginosa*, and *C. albicans*. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferri

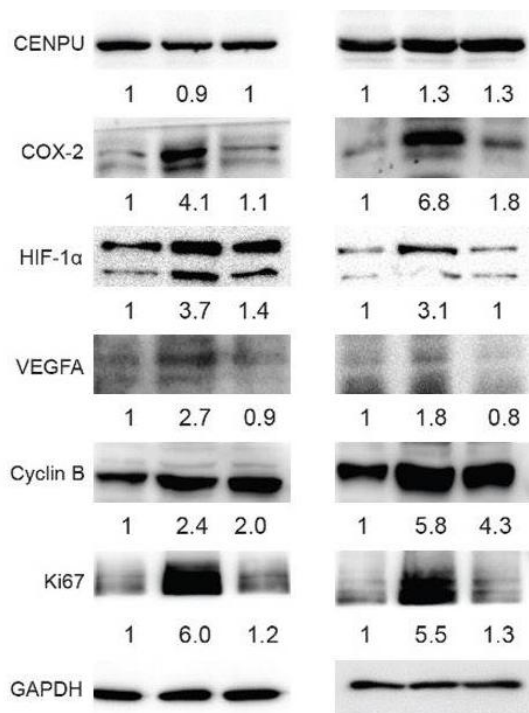
### matters needing attention

Avoid repeated freezing and thawing!

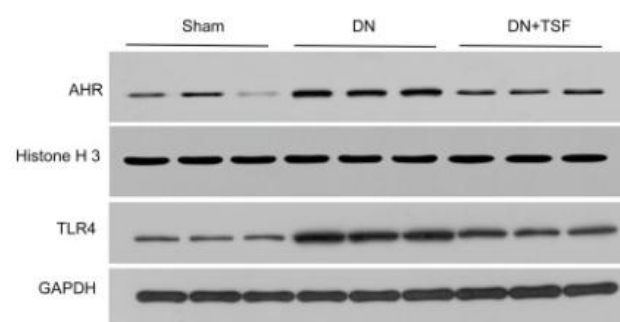
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

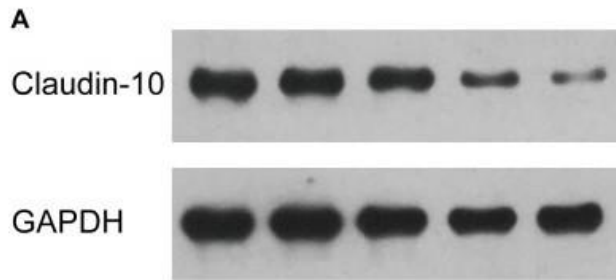
## Products Images



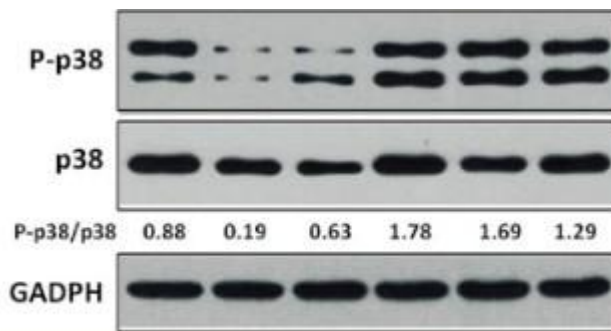
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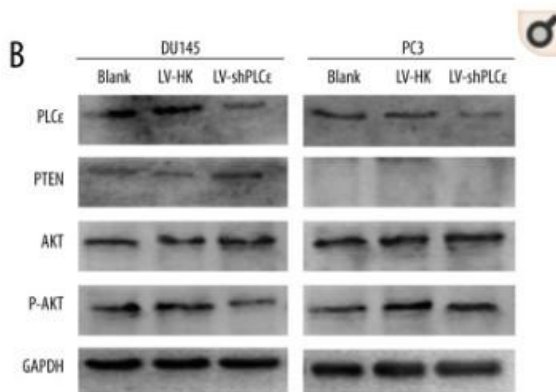
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Wang, Xiao, et al. "Knockdown of Phospholipase Cε (PLCε) Inhibits Cell Proliferation via Phosphatase and Tensin Homolog Deleted on Chromosome 10 (PTEN)/AKT Signaling Pathway in Human Prostate Cancer." *Medical science monitor: international medical journal of experimental and clinical research* 24 (2018): 254.