



GAPDH Polyclonal Antibody

Catalog No	YP-Ab-03502
Isotype	IgG
Reactivity	Human;Mouse;Rat;Rabbit;Ch;Mk;sheep;X;Fish;Chicken;Guinea pig;Guinea pig; Duck
Applications	WB;IHC;IF
Gene Name	GAPDH
Immunogen	Recombinant Protein of GAPDH
Specificity	The antibody detects endogenous GAPDH protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using specific immunogen.
Dilution	WB: 1:5000 IHC: 1:200. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GAPD;Glyceraldehyde-3-phosphate dehydrogenase;GAPDH;CDABP0047;OK/ SW-cl.12;Peptidyl-cysteine S-nitrosylase GAPDH
Observed Band	37kD
Calculated Molecular Weight	37kD
Cell Pathway	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). .
Tissue Specificity	Astrocytoma,Brain,Cajal-Retzius cell,Colon adenocarcinoma,Epitheliu
Function	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

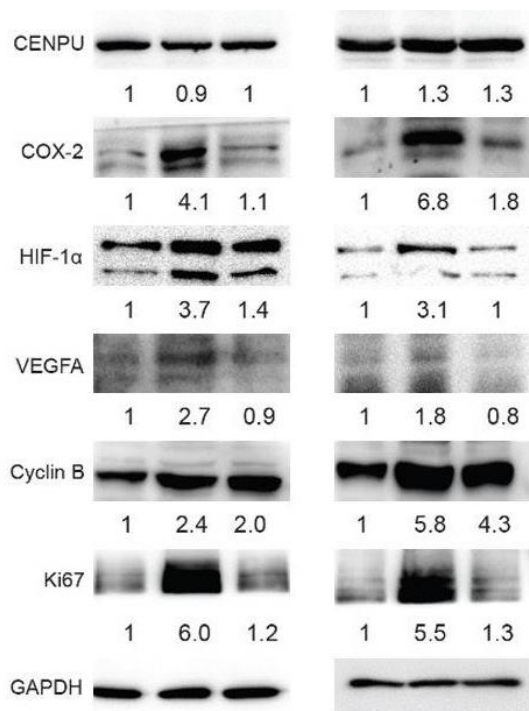
Avoid repeated freezing and thawing!

Usage suggestions

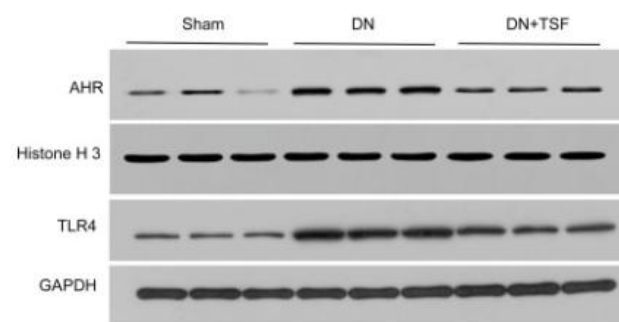
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



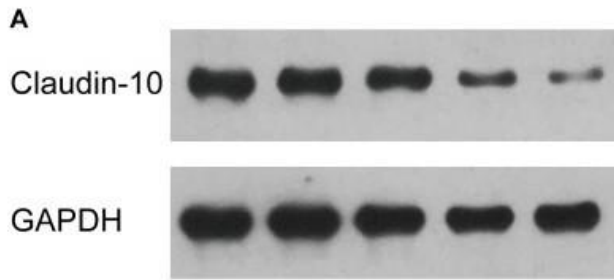
Products Images



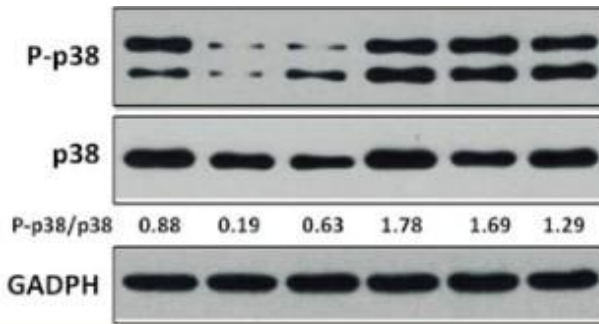
Zhao, Shaorong et al. "Deciphering the performance of polo-like kinase 1 in triple-negative breast cancer progression according to the centromere protein U-phosphorylation pathway." American journal of cancer research vol. 11,5 2142-2158. 15 May. 2021



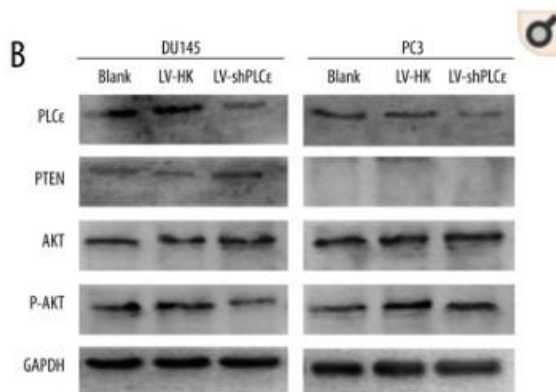
Zhao, TingTing, et al. "Tangshen formula modulates gut Microbiota and reduces gut-derived toxins in diabetic nephropathy rats." Biomedicine & Pharmacotherapy 129 (2020): 110325.



Yi, Sheng, et al. "Peripheral nerve injury induces dynamic changes of tight junction components." *Frontiers in physiology* 9 (2018): 1519.



Chang, Ying, et al. "Lentivirus-mediated knockdown of astrocyte elevated gene-1 inhibits growth and induces apoptosis through MAPK pathways in human retinoblastoma cells." *PloS one* 11.2 (2016): e0148763.



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.