

**GAPDH (PT0004R) rabbit mAb**

<b>Catalog No :</b>	YM8016
<b>Reactivity :</b>	Human;Mouse;Rat;Rabbit;Dog;Monkey;
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	GAPDH
<b>Fields :</b>	>>Glycolysis / Gluconeogenesis;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids;>>HIF-1 signaling pathway;>>Alzheimer disease;>>Pathogenic Escherichia coli infection;>>Salmonella infection;>>Diabetic cardiomyopathy
<b>Gene Name :</b>	GAPDH
<b>Protein Name :</b>	Glyceraldehyde-3-phosphate dehydrogenase
<b>Human Gene Id :</b>	2597
<b>Human Swiss Prot No :</b>	P04406
<b>Mouse Swiss Prot No :</b>	P16858
<b>Immunogen :</b>	Synthesized peptide derived from human protein. AA range:200-300
<b>Specificity :</b>	endogenous
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Monoclonal Rabbit IgG, Kappa
<b>Dilution :</b>	WB 1:500-2000 ELISA: 1:20000
<b>Purification :</b>	Protein A
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	37kD

**Observed Band :** 37kD

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**Cell Pathway :** Glycolysis / Gluconeogenesis;Alzheimer's disease;

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**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

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**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

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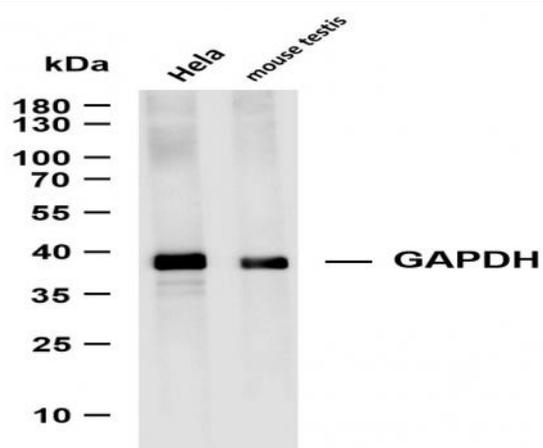
**Subcellular Location :** Cytoplasm, cytosol . Nucleus . Cytoplasm, perinuclear region . Membrane . Cytoplasm, cytoskeleton . Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions (PubMed:12829261) .

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**Expression :** Astrocytoma,Brain,Cajal-Retzius cell,Colon adenocarcinoma,Epitheliu

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## Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GAPDH (PT0004R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1:PT0004R Lane 2: mouse testis Predicted band size: 37kDa Observed band size: 37kDa