

GAPDH Monoclonal Antibody(2B8), AbFluor 647 Conjugated

Catalog No :	YM2048
Reactivity :	Human;Rat;Mouse;Mk;Dg;Ch;Hamster;Rabbit;Pig;sheep;Insect;Yeast
Applications :	WB;IF;IHC
Target :	GAPDH
Fields :	>>Glycolysis / Gluconeogenesis;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids;>>HIF-1 signaling pathway;>>Alzheimer disease;>>Pathogenic Escherichia coli infection;>>Salmonella infection;>>Diabetic cardiomyopathy
Gene Name :	GAPDH
Protein Name :	Glyceraldehyde-3-phosphate dehydrogenase
Human Gene Id :	2597
Human Swiss Prot No :	P04406
Specificity :	GAPDH Monoclonal Antibody(2B8) AbFluor™ 647 Conjugated specially designed for your Immunofluorescence analysis.
Formulation :	Liquid in PBS, pH 7.4, containing 0.02% sodium azide as preservative and 50% Glycerol.
Source :	Monoclonal, Mouse IgG1
Dilution :	Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: IHC 1:200, IF 1:200.
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Concentration :	1mg/ml
Storage Stability :	Stable for one year at -15°C to -25°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing

the cap. Aliquot to avoid repeated freezi

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

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

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

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). .

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

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