

# GAPDH-biotin Mouse mAb

**Cat. QYA03819biotin**

## **Background**

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 transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants.

## **Source**

GAPDH-biotin mouse monoclonal antibody is produced by immunizing animals with the internal region of human GAPDH protein, which was conjugated to biotin. The antibody was affinity-purified by affinity-chromatography using specific immunogen.

## **Product**

Each vial contains 100ug mouse IgG diluted in 100ul of PBS pH7.4, containing 1mg/ml BSA, 0.02% sodium azide and 50% glycerol. The antibody concentration is 1mg/ml.

## **Specificity**

The antibody detects endogenous GAPDH proteins.

## **Applications and Suggested Working Concentration**

WB: 1:1000

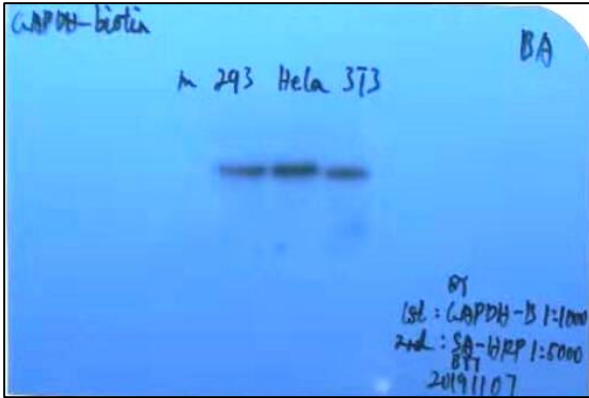
## **Storage**

Storage at -20°C. Do not aliquot the antibody. Stable for one year from the date of shipment.

## **Research Use**

For research use only, not for use in diagnostic procedures.

Data



Western blot analysis:

1. 293 2. HeLa 3. 3T3

Antibody was diluted at 1:1000.

## GAPDH Mouse mAb

<b>Catalog No.</b>	QYA03819A
<b>Size.</b>	100ug
<b>Gene Name.</b>	GAPDH
<b>Protein Name.</b>	GAPDH, glyceraldehyde-3-phosphate dehydrogenase
<b>Source.</b>	Mouse
<b>Immunogen.</b>	Synthesized peptide
<b>Purification.</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using specific immunogen.
<b>Specificity.</b>	The antibody detects endogenous GAPDH protein.
<b>Formulation.</b>	PBS, pH 7.4, containing 0.02% sodium azide and 50% Glycerol.
<b>Concentration.</b>	1 mg/ml
<b>Storage / Stability.</b>	-20°C/1 year
<b>Human Gene ID.</b>	2597
<b>Human Swiss-Prot No.</b>	P04406
<b>Mouse Gene ID</b>	100042025
<b>Mouse Swiss-Prot No.</b>	P16858
<b>Rat Gene ID</b>	24383
<b>Rat Swiss-Prot No.</b>	P04797
<b>Reactivity.</b>	H, R, M, Mk, Dg, C, Hm, Rb, Pg, Sh, Insect, Yeast
<b>Applications.</b>	WB, IF, IHC
<b>Predicted band (Da)</b>	36053
<b>Observed band (KDa)</b>	37
<b>Dilution.</b>	WB:1:5000-1:20000, IF:1:200, IHC:1:200
<b>Other name.</b>	GAPDH; GAPD; CDABP0047; OK/SW-cl.12; Glyceraldehyde-3-phosphate dehydrogenase; GAPDH; Peptidyl-cysteine S-nitrosylase GAPDH