Qty: 100 µg/200 µL

Mouse anti-GAPDH

Catalog No. 39-8600

Lot No.

Mouse anti-GAPDH

FORM
This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: ZG003 **ISOTYPE:** Mouse IgG1-kappa

IMMUNOGEN
Recombinant full-length human GAPDH protein

SPECIFICITY
This antibody is specific for the GAPDH (glyceraldehyde-3-phosphate dehydrogenase) protein. On Western blots, it identifies the target band at ~40 kDa.

REACTIVITY
Reactivity has been confirmed with human HeLa and Jurkat and mouse NIH 3T3 cell lysates.

Sample	ELISA	Western Blotting
Human	ND	+++
Mouse	ND	++
Immunogen	+++	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-1.0 µg/mL
Western Blotting: 1 µg/mL

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

GAPDH (glyceraldehyde-3-phosphate dehydrogenase) is one of the key enzymes involved in glycolysis.[1-2] It 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 enzyme exists as a tetramer of identical chains. Besides functioning as a glycolytic enzyme in cytoplasm, recent evidence suggest that mammalian GAPDH is also involved in a great number of intracellular proceses such as membrane fusion, microtubule bundling, phosphotransferase activity, nuclear RNA export, DNA replication, and DNA repair. GAPDH has also been implicated in cancer progression[3], programmed neuronal cell death, and age-related neuronal diseases such as Alzheimer's and Huntington's. GADPH is widely expressed and can also serve as a loading control.

REFERENCES

1. Allen RW, et al. *J Biol Chem* 262:649-653, 1987.
2. Meyer-Siegler K, et al. *PNAS* 88:8460-8464, 1991.
3. Tokunaga K, et al. *Cancer Res* 47:5616-5619, 1987.

RELATED PRODUCTS

Product	*Conjugate*	*Cat. No.*
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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MZ060316