

## Glyceraldehyde 3-phosphate dehydrogenase (GAPDH) monoclonal antibody

Cat. no. A21994

<b>Components:</b>	100 µg monoclonal antibody
<b>Lot no.:</b>	See product label
<b>Clone/PAD:</b>	3E8AD9
<b>Isotype:</b>	Mouse IgG2b
<b>Gene ID:</b>	2597
<b>Gene Symbol:</b>	GAPDH
<b>Alternative Names:</b>	Glyceraldehyde-3-phosphate dehydrogenase, G3PD, GAPD, MGC88685
<b>Concentration:</b>	1 mg/mL in Hepes-Buffered Saline (HBS) with 0.02% sodium azide as a preservative
<b>mAb PURITY:</b>	Near homogeneity as judged by SDS-PAGE. The antibody was produced <i>in vitro</i> using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
<b>Reactivity:</b>	Human
<b>Immunogen:</b>	Purified GAPDH from human erythrocytes, purified PC from bovine liver
<b>Validated Applications:</b>	Western blotting, immunocytochemistry, immunoprecipitation
<b>Suggested Working Concentration:</b>	0.125 µg/mL for Western blotting, 0.5 µg/mL for immunocytochemistry (This is a starting working concentration. The optimal antibody concentration should be determined empirically for each specific application.)
<b>Storage:</b>	Store at 2–8°C. Do not freeze.
<b>Expiration Date:</b>	See product label.

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### Target Background:

The GAPDH gene product catalyzes the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD), which is an important energy-yielding step in carbohydrate metabolism. The enzyme exists as a tetramer of identical chains. Many pseudogenes similar to this locus are present in the human genome.

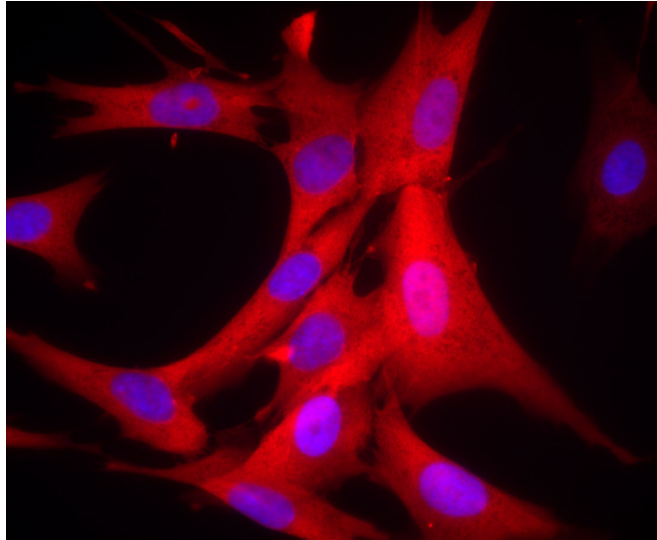


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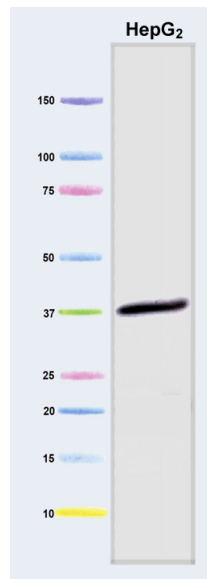
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**Immunocytochemistry image of Glyceraldehyde 3-phosphate dehydrogenase (GAPDH) monoclonal antibody.** Human HDFn cells were fixed in 4% paraformaldehyde for 20 minutes and then permeabilized with 0.1% Triton® X-100 for 15 minutes. The cells were incubated with 0.5 µg/mL of the antibody for 2 hours at room temperature or overnight at 4°C. Alexa Fluor® 594 goat anti-mouse IgG (H+L) was used as a secondary antibody at a 1:1,000 dilution for 1 hour (red). 10% Goat serum was used as the blocking agent for all blocking steps. The cell nuclei were counterstained with DAPI (blue). Target protein locates mainly in cytoplasm.



**Western Blot image of Glyceraldehyde 3-phosphate dehydrogenase (GAPDH) monoclonal antibody.** Samples were separated by SDS-PAGE (gradient gel, 10–20%). The bands were transferred to a PVDF membrane and incubated with the primary antibody at the recommended working concentration. AP-conjugated GAM secondary antibodies were used at a 1:3,000 dilution for detection and the signal was developed with AP development kit.

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