

Anti-GAPDH (5H11) antibody

Cat. No.	AbC-1001
Size	200ul
Host Species	Mouse
Cross reactivity	Human, Rat
Tested application	ELISA, Western blot, IP (Other application is not tested)
Immunogen	Synthetic peptide. VGVDSVEGEGEEGEE (435-450aa) of human GAPDH.
Form	Liquid
Storage	Store at -20°C.
Purification	Immunoaffinity chromatography purified.
Concentration	1mg/ml
Storage buffer	0.02% sodium azide, 50% glycerol in PBS
Clonity	Monoclonal
Isotype	IgG ₁ , κ
Positive control	HeLa cell

Background

Glyceraldehyde 3-Phosphate Dehydrogenase (GAPDH) is a metabolic enzyme responsible for catalyzing one step in the glycolytic pathway, the reversible oxidative phosphorylation of glyceraldehyde 3-phosphate. GAPDH is a ubiquitously expressed and has a molecular mass of 37 kD. 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 its functioning as a glycolytic enzyme in cytoplasm, recent evidence suggest that mammalian GAPDH is also involved in a great number of intracellular processes such as membrane fusion,

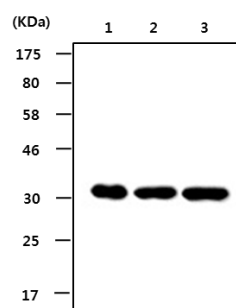
microtubule bundling, phosphotransferase activity, nuclear RNA export, DNA replication, and DNA repair. The protein may also have a role in the regulation of apoptosis, and interestingly migrates from the cytoplasm into the nucleus when cells become apoptotic.

Recommended Dilution

ELISA	1/10000 – 1/20000
Western blot	1/10000
IP	2ug

Optimal working dilutions must be determined by end user.

Image



Western blot analysis of cell lysate :
 Lane 1: HeLa cell lysate
 Lane 2: HEK 293 cell lysate
 Lane 3: L6 cell lysate

Reference

- 1) Fortun J, Dunn WA, Joy S, Li J, Notterpek L. *J. Neurosci.* 23:10672-10680, 2003.
- 2) Morgenegg G, Winkler GC, Hubscher U, Heizmann CW, Mous J, Kuenzle CC. *J. Neurochem.* 47:54-62, 1986.

Note : For research use only. Not for use in diagnostic procedures.