

Catalog No. LF-MA0100

MONOCLONAL ANTIBODY



## Anti- GAPDH-SO<sub>3</sub> (4A1)

**Background:** Glyceraldehyde-3-phosphate dehydrogenase(GAPDH) is a catalytic enzyme commonly known to be involved in glycolysis. The enzyme exists as a tetramer of identical 37-kDa subunits. GAPDH catalyzes the reversible reduction of 1,3-bisphosphoglycerate to glyceraldehyde 3-phosphophate in the presence of NADPH. Apart from playing a key role in glycolysis, this ubiquitously expressed enzyme also displays other activities unrelated to its glycolytic function. GAPDH is reported to be involved in the processes of DNA replication, DNA repair, nuclear RNA export, membrane fusion and microtubule bundling. Other studies also provide evidence of GAPDH playing an essential part of the program of gene expression observed in apoptosis and as part of the cellular phenotype of age-related neurodegenerative diseases. On recent study, GAPDH has identified of the most oxidant sensitive cell proteins.

**Immunogen :** Sulfonylated peptide (KLH coupled) corresponding to the oxidation sensitive site sequence to human GAPDH

**Isotype :** IgG1,  $\kappa$

**Host :** Mouse

**Clone number :** 4A1

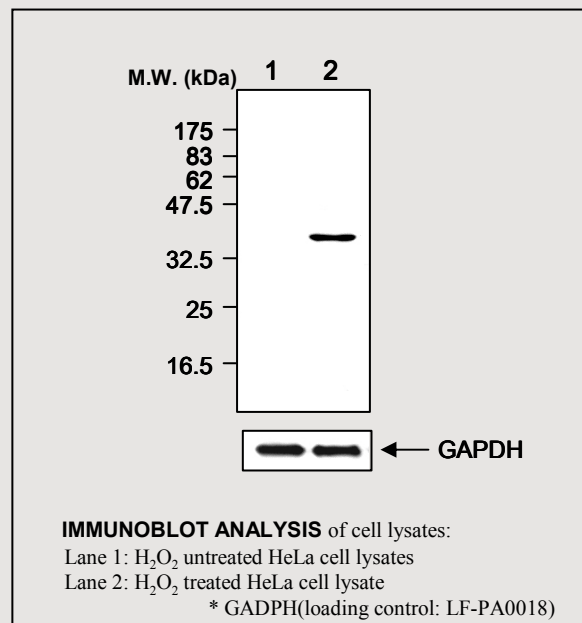
**Size :** 100ul

**Composition :** PBS containing 50% glycerol

**Storage :** Store for 1 year at -20°C from date of shipment

### Species cross reactivity

Human +	Mouse NT	Rat NT
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### Application :

Western blotting (1:200-1000)

### Background Reference :

- (1) Baxi, M. D. et.al.(1995)*Biochemistry*.34:9700-9707
- (2) Singh, R. et.al.(1993)*Science*. 259:365-368
- (3) Han, X. et. al. (1998)*Biochem. Biophys. Acta*. 1414 :95-107
- (4) Kragten, E. et.al. (1998) *J. Biol. Chem.* 273 :5821-5828
- (5) Baty,J.W.et.al.(2005)*Biochem J*. Mar 31, published

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