Lanleys[™] Biotechnologies Laboratory GAPDH (4B6)

CATALOG

Mab2041

BACKGROUND

Glyceraldehyde 3-phosphate dehydrogenase (GAPDH or less commonly known as G3PDH) (EC 1.2.1.12) is an enzyme that catalyses the conversion of glyceraldehyde 3-phosphate to D-glycerate 1,3bisphosphate in the cytosol of eukaryotic cells. This is the sixth step of glycolysis, an important pathway to supply energy and carbon molecules for the needs of cellular activities. When cells are under oxidative stress. GAPDH is inactivated to allow cells to produce antioxidant cofactor NADPH from NADP+. In addition to this long established metabolic function, GAPDH has recently been implicated in several non-metabolic processes, including transcription activation, initiation of apoptosis, and ER to Golgi vesicle shuttling.

SOURCE

This is a mouse monoclonal antibody raised against the full-length GAPDH of human origin.

GENE SYMBOL

GAPDH (Human)

ISOTYPE

IgG₁

PHYSICAL FORM

Freeze-dried powder from $1 \times PBS$ solution

SPECIFICITY

This antibody detects GAPDH of human but not mouse origins. Other species have not been tested.

MOLECULAR WEIGHT

37 kDa (GAPDH)

APPLICATIONS

Western blotting (WB, dilution range: 1:1,000 – 10,000). Other applications have not been tested.

STORAGE

Store freeze-dried powder at 2 - 8°C upon arrival. When ready to use, rehydrate with 0.1 ml dH₂O and centrifuge if not clear. For long-term storage, make aliquots and keep them at -20°C or below. Avoid repeated freezing and thawing cycles.

DATA

>> Western blot: HT-1080 (**A**) and NIH/3T3 (**B**) cell extracts prepared in 1% Triton-X lysis buffer.



IMPORTANT NOTE

This product is intended for research use only, not for use in human therapeutic or diagnostic procedures.

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