Anti GAPDH Antibody-HRP

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1. Product Description

1.1 Product Description

GAPDH has a molecular weight of 146 kDa and consists of four subunits, each ranging from 30 to 40 kDa. As a key enzyme in the glycolytic pathway, its primary function is to catalyze the oxidation (dehydrogenation) and phosphorylation of glyceraldehyde-3-phosphate to produce 1,3-bisphosphoglycerate. Due to its widespread distribution across various tissues, consistently high expression levels, and stable expression unaffected by external inducers, GAPDH is widely used as a standard internal reference in experiments such as qPCR and Western blot (WB). The Anti-GAPDH Antibody-HRP is produced by conjugating horseradish peroxidase (HRP) to a GAPDH antibody through a specific process. During WB experiments, the addition of luminol (Solution A) and hydrogen peroxide (Solution B) initiates a chemiluminescent reaction. In the presence of HRP, luminol reacts with hydrogen peroxide to form an unstable peroxide intermediate, which rapidly decomposes into an electronically excited intermediate. As this intermediate returns to its ground state, light is emitted, enabling the detection of the GAPDH reference protein.

1.2 Basic Information

Antibody Source: Recombinant Antibody
Cross Reactivity:Human, rat, mouse, plant, yeast, etc.
Clone Type: Monoclonal Antibody
Conjugate: Horseradish Peroxidase (HRP)
Purification Methodr: rProtein A Affinity Purification
Storage Buffer: 1×PBS (pH 7.4), 0.05% ProClin 300, 50% Glycerol
Storage Conditions: Shipped with dry ice. Stable for 2 years at -20°C. Avoid freeze/thaw cycles.

2. Product Applications

WB: 1:3000-1:10000

3. Precautions

1）This product is an HRP-conjugated antibody. Store at -20°C or -80°C and protect from light.
2）This product exhibits high sensitivity. Please strictly adhere to the recommended dilution ratios provided in the manual for Western Blotting (WB) to avoid potential non-specific bands.
3）Prior to transfer, the PVDF membrane must be pre-wetted (activated) with methanol. Use an excess volume of antibody diluent after transfer. Avoid the formation of air bubbles during both the transfer and antibody incubation steps.
4）A strong signal can be generated by incubating at 37°C for 30–60 minutes. If incubating at room temperature, extend the incubation time accordingly.

4. Reference Information

1）Sample Information: Vero、BHK、293、Jukat、Hela、K562、NIH/3T3、CHO and EL4-B5 cell lines.
2）Sample Processing: After washing 3×10^6 cells three times with PBS, resuspend in 1 ml PBS. Mix 10 μl of the suspension with 10 μl of 2× loading buffer and denature by boiling at 100°C for 10 min.

3) Loading Volume: 10 μl (containing 2× loading buffer).
4) Antibody Dilution Ratios: Add 0.5 μL of Anti GAPDH Antibody-HRP (1:5000) to 25 mL of antibody diluent.
5) Antibody Incubation Conditions: Incubate at 37°C with agitation for 30 min.
6) Results:

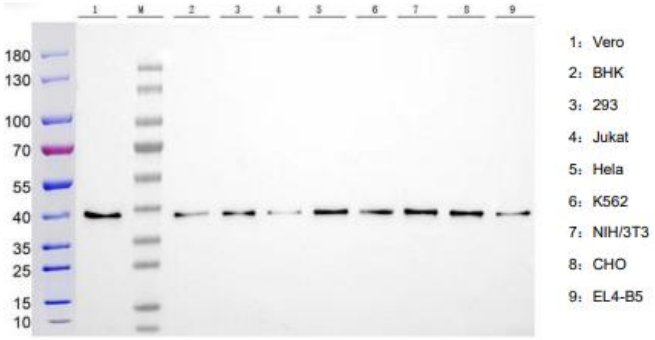

Figure 1. Western Blot Analysis of GAPDH Antibody in Various Cell Lines

As shown in the figure, the Anti GAPDH Antibody-HRP detects GAPDH protein across different cell lines, yielding a single band at approximately 37 kDa.

5. Product Ordering

Product	Cat.No.	Size
Anti GAPDH Antibody-HRP	BP5018-01	20μl
	BP5018-02	100μl
	BP5018-03	1ml

6.Related Products

Product	Name	Cat.No.
Whole Cell Lysate Loading Control Antibod	Anti GAPDH Antibody-HRP	BP5018
	Anti Hsp90 Antibody-HRP	BP5019
Cytoskeletal Loading Control Antibody	Anti β-tubulin Antibody-HRP	BP5020
Nuclear Loading Control Antibody	Anti Histone H3 Antibody-HRP	BP5021