

Anti Hsp90 Antibody-HRP

Index

1. Product Description	1
2. Product Applications	1
3. Precautions	1
4. Reference Information	2
5. Product Ordering	2
6. Related Products	2

1. Product Description

1.1 Product Description

Hsp90 belongs to the heat shock protein family, which includes other members such as Hsp110, Hsp70, Hsp60, and small heat shock proteins. These family members share a distinctive C-terminal motif for ATP binding. Hsp90 is one of the most abundant proteins in cells, with a molecular weight of approximately 90 kDa, and is essential for the viability of eukaryotes. Consequently, it is frequently used as a loading control in Western blotting. The Anti-Hsp90 Antibody-HRP is generated by conjugating Horseradish Peroxidase (HRP) to the Hsp90 antibody. During Western Blot detection, upon the addition of the chemiluminescent substrates A (typically Luminol) and B (Hydrogen Peroxide), HRP catalyzes the reaction between Luminol and Hydrogen Peroxide to form a peroxide. This peroxide is unstable and rapidly decomposes, yielding an excited-state intermediate. Fluorescence is emitted when this excited intermediate returns to its ground state, thereby enabling the detection of the Hsp90 loading control protein.

1.2 Basic Information

Antibody Source: Recombinant Antibody

Cross Reactivity: Human, Mouse

Clone Type: Monoclonal Antibody

Conjugate: Horseradish Peroxidase (HRP)

Purification Method: Protein 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: 1:1000-1:5000

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.
- 5) This product exhibits superior sensitivity for human Hsp90 protein compared to mouse Hsp90 protein.

4. Reference Information

- 1) Sample Information: 293, HeLa, murine EL4-B5 cell lines.
- 2) Sample Processing: After washing 3×10^6 cells three times with PBS, resuspend in 1 ml PBS. Mix 10 μ l of the suspension with 10 μ l of 2× loading buffer and denature by boiling at 100°C for 10 min.
- 3) Loading Volume: 10 μ l (containing 2× loading buffer).

- 4) Antibody Dilution Ratios: Dilute Anti Hsp90 Antibody-HRP in 5 ml antibody dilution buffer at the following ratios: 1 µl (1:5000) and 5 µl (1:1000).
- 5) Antibody Incubation Conditions: Incubate at 37°C with agitation for 30 min.
- 6) Results:

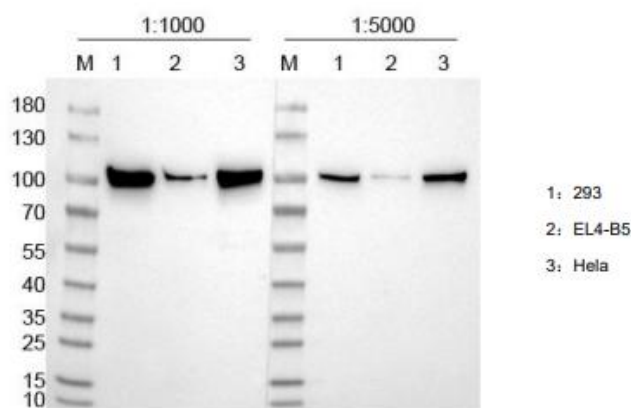


Figure 1. Western Blot Analysis of Hsp90 Antibody in Various Cell Lines

As shown in the figure, the Anti Hsp90 Antibody-HRP detects Hsp90 protein across different cell lines, yielding a single band at approximately 90-100 kDa.

5. Product Ordering

Product	Cat.No.	Size
Anti Hsp90 Antibody-HRP	BP5019-01	20µl
	BP5019-02	100µl
	BP5019-03	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