

Anti HA Antibody-HRP

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1. Product Description

1.1 Product Introduction

Hemagglutinin (HA) refers to a red blood cell agglutinin. Hemagglutinin is immunogenic, and anti-hemagglutinin antibodies can neutralize it. The HA tag is a short peptide sequence derived from amino acids 98-106 of the human influenza virus hemagglutinin protein, with the amino acid sequence YPYDVPDYA. The molecular weight of the HA tag is approximately 1.1 kDa, making it one of the most widely used tags. By using recombinant DNA technology to fuse the HA tag to the C-terminus or N-terminus of a target protein, it facilitates the purification and detection of the target protein. Antibodies against the HA tag enable precise detection and purification of HA-tagged fusion proteins. Horseradish Peroxidase (HRP) is conjugated to the anti-HA antibody through a specific process. In Western blot (WB) experiments, upon adding chemiluminescent substrates A and B (typically luminol and hydrogen peroxide), the luminol reacts with hydrogen peroxide under the catalytic action of HRP to form an unstable peroxide intermediate. This intermediate decomposes, generating an electronically excited species. When this species returns to the ground state, light is emitted, allowing for rapid detection of the HA-tagged fusion protein.

1.2 Basic Information

Antibody Source: Recombinant Antibody

Cross Reactivity: HA-tagged Fusion Proteins

Clonality: Monoclonal Antibody

Conjugate: Horseradish Peroxidase (HRP)

Purification Method: Protein A Affinity Purified

Storage Buffer: 1× PBS (pH 7.4), 0.05% proclin300, 50% Glycerol

Storage Conditions: Shipped on dry ice. Store at -20°C for up to 2 years. Avoid repeated freeze-thaw cycles.

2. Product Applications

WB=1:30000-1:100000

ELISA=1:5000-1:10000

3. Additional information

3.1 This product is an HRP-conjugated antibody and must be stored protected from light at -20°C or -80°C.

3.2 This product is highly sensitive. For Western blot (WB), please follow the recommended dilution ratios provided in the manual to avoid non-specific signals.

3.3 NC or PVDF membranes must be activated with methanol prior to transfer. After transfer, ensure thorough coverage with antibody dilution buffer, and avoid creating bubbles during both the transfer and antibody incubation steps.

3.4 This product can generate strong signals after 30-60 minutes of incubation at 37°C. If incubating at room temperature, prolong the duration appropriately.

4. Reference Information

1) Expression System: Secretory expression in 293 cells.

2) Protein Information: Recombinant protein with an HA tag, approximate size ≈55 kDa.

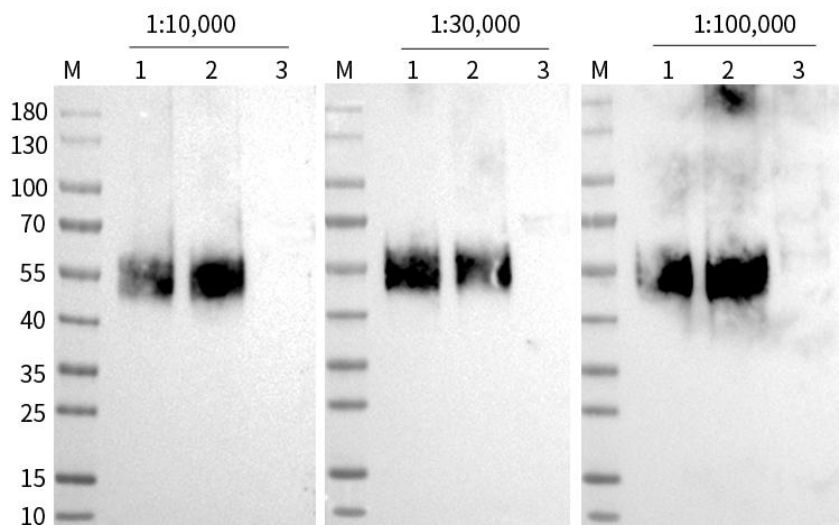
3) Loading Order: Lane 1: Medium sample containing approximately 10 ng of the target protein; Lane 2: 10 ng of purified target protein; Lane 3: Bovine Serum Albumin (BSA).

4) Antibody Diluent Volume: 10 mL.

5) Antibody Incubation Conditions: 37°C with shaking for 30 minutes.

6) Detection: ECL chemiluminescent substrate.

7) Results:



1: Medium sample containing the target protein (10 ng); 2: Purified target protein (10 ng); 3: BSA

8) Conclusion: After diluting Anti HA Antibody-HRP at ratios of 1:10,000, 1:30,000, and 1:100,000 (in a total antibody diluent volume of 10 mL) and incubating with shaking at 37°C for 30 minutes, distinct signals were observed. The target band was detected at the expected position of 55 kDa. The signal intensity decreased progressively as the dilution ratio increased.

5. Related Products

Product	Cat.No.	Size
Anti HA Antibody-HRP	BP5015-01	20µl
	BP5015-02	100µl
	BP5015-03	1ml