Jackson ImmunoResearch
LABORATORIES INC.

INTRODUCING

Anti-His Tag Antibodies



Anti-His Tag Antibodies from Jackson ImmunoResearch



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The addition of PolyHistidine Tags (His Tags) to recombinant proteins is a common method to enable protein purification and detection. The His Tag is usually formed of 6 histidine residues, but may be between three and ten, usually at the C- or N-terminus of the recombinant protein. His tags are popular due to their inexpensive purification via resins such as NiNTA. Anti-His Tag antibodies are used to detect tagged proteins, an essential step in protein expression screening.

Jackson ImmunoResearch's Anti-His Tag antibodies are suitable for the detection of His-Tagged proteins by both Western blotting and ELISA, and in combination with conjugated anti-rabbit antibodies offer excellent sensitivity.

Anti-His Tag Antibodies



Confidently Screen His-Tagged Proteins Whatever the Expression System

Protein expression screening of His-Tagged recombinant proteins (constructs) from cell lysates is a popular application of Anti-His Tag antibodies. Anti-His Tag antibodies allow the detection of both carboxy- and aminoterminally His-Tagged proteins. **Figure 1** demonstrates the detection of a recombinant His-Tagged protein from mammalian, insect, and bacterial cell lysates.

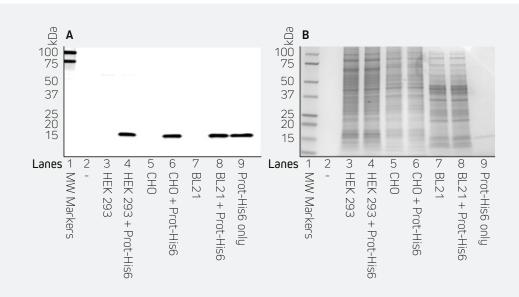


Figure 1. Detection of His-Tagged proteins in a range of cell lysates.

C-terminally His-Tagged protein was added at 100 ng to the cell lysates. Cell lysates of HEK 293, CHO, and BL21 E. coli were reduced and boiled for 5 minutes at 100°C and loaded at 9 µg/well in tandem SDS gels.

- A. Western blot. Gels were electroblotted onto nitrocellulose membrane, blocked with 5% BSA in PBS/0.2% Tween 20, and probed with Jackson ImmunoResearch's HRP Rabbit Anti-His Tag (300-035-240) at 1:20K dilution and visualized using a digital imager.
- B. Gels were stained with Coomassie.

Single-Step Western Blotting

Jackson ImmunoResearch's Anti-His Tag antibodies can be used directly using a Horseradish Peroxidase conjugate. Jackson ImmunoResearch's HRP Rabbit Anti-His Tag antibody can be used across a range of dilutions and sensitive detection of different His-Tagged proteins can be achieved. The sensitivity of the Western blot assay can be enhanced by performing the assay indirectly, using a conjugated secondary antibody to achieve increased signal.

Enhanced Sensitivity by Indirect Detection

Signal enhancement can be achieved by indirect detection of the His Tag using an Anti-His Tag antibody followed by a conjugated Anti-Rabbit antibody such as an HRP Goat Anti-Rabbit secondary antibody.





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