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Say goodbye to westerns

Fast, specific in-gel visualization of His-tagged fusion proteins

InVision™ His-tag In-gel Stain enables you to:

- Specifically stain His-tagged fusion proteins
- Visualize directly in gels—eliminating western blotting
- Detect nanogram levels of His-tagged fusion proteins in just over an hour

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Rapid, specific, and sensitive in-gel staining of His-tagged fusion proteins

InVision™ His-tag In-gel Stain is a ready-to-use, highly specific fluorescent stain for visualizing His-tagged fusion protein bands directly in a polyacrylamide gel. An easy staining protocol eliminates the need for western blotting, saving you time and effort. You'll confirm His-tagged fusion protein expression rapidly and confidently, detecting nanogram levels of protein.

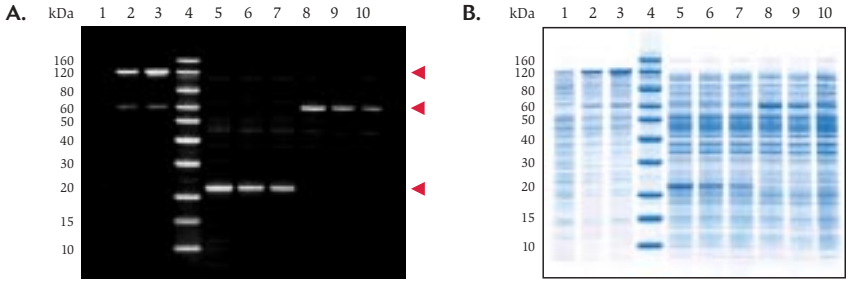
High specificity

The high specificity of InVision™ Stain enables you to identify His-tagged proteins with confidence. InVision™ Stain utilizes a fluorescent dye conjugated to a Ni^{2+}:nitrilotriacetic acid (NTA) complex. The Ni^{2+} ions bind with high affinity to the oligohistidine sequence for clear visualization of your His-tagged proteins. This is in contrast with Coomassie® staining, where it is often impossible to distinguish His-tagged protein bands from the endogenous protein population.

Sensitive detection

The proprietary fluorescent dye that yields the bright InVision™ Stain signal makes the stain highly sensitive. However, you do not need a sophisticated imaging system to detect the fluorescent signal. Using a UV transilluminator equipped with a standard camera, you can detect nanogram levels of His-tagged protein with minimal background (Figure 1A). You can also detect the InVision™ Stain signal with a visible light laser-based scanner.

Figure 1 - Specific, sensitive His-tagged fusion protein detection with InVision™ His-tag In-gel Stain



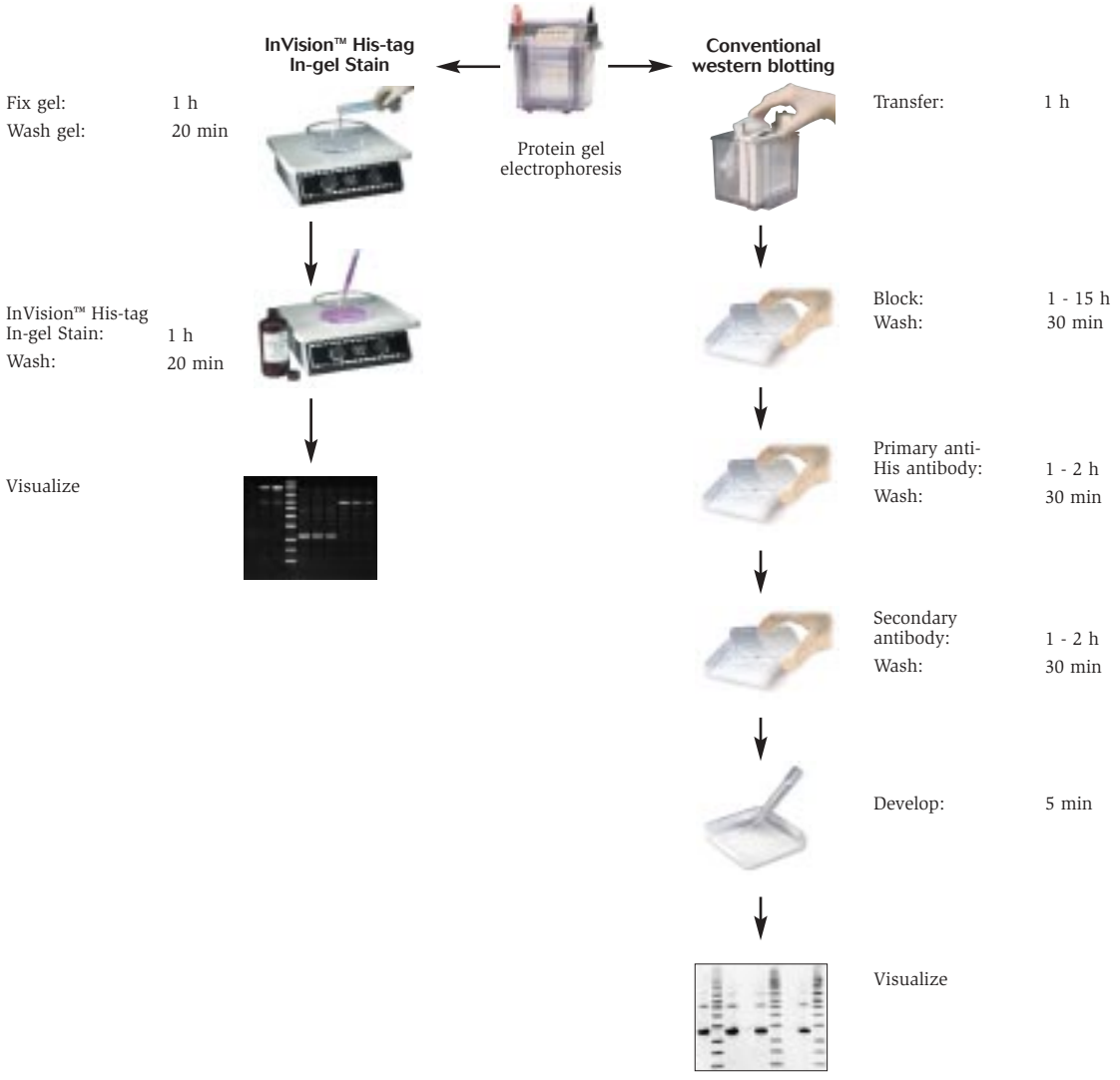
Samples were electrophoresed on a NuPAGE® Novex 4-12% Bis-Tris Gel. The gel was stained with InVision™ His-tag In-gel Stain to detect recombinant His-tagged fusion proteins (A). Subsequently the gel was Coomassie® stained for total protein detection with SimplyBlue™ SafeStain (B). Arrows indicate His-tagged fusion proteins.

Lanes 1-3: His-LacZ expression in BL21 *E. coli*: uninduced, 1 h post induction, 2 h post induction, respectively
Lane 4: 5 µl BenchMark™ His-tagged Protein Standard
Lanes 5-7: 160 ng, 80 ng, 40 ng, respectively, of pure 25 kDa His-tagged protein mixed into BL21 Star™ *E. coli* lysate
Lane 8-10: 160 ng, 80 ng, 40 ng, respectively, of pure 60 kDa His-tagged protein mixed into BL21 Star™ *E. coli* lysate

Quicker and easier than western blotting

Staining with InVision™ His-tag In-gel Stain is easy and requires little hands-on time. There's no transfering of proteins onto a membrane, long blocking and incubation steps, or use of antibodies. In less than three hours you will visualize His-tagged fusion protein bands, saving up to 19 hours compared with conventional western blotting (Figure 2). For added speed, you can choose the microwave procedure that takes just over an hour. If you want to visualize all the proteins present in the gel, just stain with a total protein stain (Figure 1B) after documenting your InVision™ Stain signal.

Figure 2 - His-tagged protein detection using InVision™ His-tag In-gel Stain vs. conventional western blotting



Length of procedure: 2 h 40 min with standard protocol or 70 minutes with microwave protocol

Outcome: Fast, specific, and sensitive in-gel detection

Length of procedure: 5 h 35 min – 21 h 35 min

Outcome: Specific and highly sensitive western detection

Ensure your His-tagged protein detection results

The BenchMark™ His-tagged Protein Standard is designed and optimized for use with the InVision™ His-tag In-Gel Stain. You can confirm your staining procedure and easily size your His-tagged fusion proteins at the same time. The ready-to-use, BenchMark™ His-tagged Protein Standard is made up of ten affinity-purified His-tagged proteins in the range of 10-160 kDa and can be visualized with the InVision™ Stain as clear and intense bands in your gel (Figure 1A, lane 4). With the BenchMark™ His-tagged Standard, you'll be sure of the results from your His-tagged protein detection experiments.

Detect His-tagged proteins with confidence and speed

Say goodbye to westerns and confirm expression of your His-tagged proteins with certainty and ease. Order your InVision™ His-tag In-gel Stain and BenchMark™ His-tagged Protein Standard today.

Product	Quantity	Cat. no.
InVision™ His-tag In-gel Stain	500 ml*	LC6030
BenchMark™ His-tagged Protein Standard	125 µl**	LC5606
InVision™ His-tag In-gel Staining Kit†	1 kit	LC6033

* 500 ml of LC6030 provides sufficient reagent to stain 20 mini-gels.
** 125 µl of LC5606 provides 25 applications of 5 µl each
† The InVision™ His-tag In-gel Staining Kit includes one bottle of InVision™ His-tag In-gel Stain (LC6030) and one vial of BenchMark™ His-tagged Protein Standard (LC5606).

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