ProLite™ His-Tag Protein Gel Staining Kit *Green Fluorescence*

Catalog number: 18010
Unit size: 10 Gels

Component	Storage	Amount
ProLite™ His Tag Protein Gel Stain	Freeze (< -15 °C), Minimize light exposure	5 vials (10 Gels)

OVERVIEW

The polyhistidine tag (His-Tag) is widely used for protein purification, detection, and immobilization. The ProLite™ His-Tag Protein Gel Staining Kit provides a fast, sensitive, and highly specific fluorescent stain for visualizing His-tagged fusion proteins directly in a polyacrylamide gel following electrophoresis. This kit requires very little hands-on time, allowing for rapid protein expression screening in a variety of gel types using an imaging equipment with a standard FITC filter. It detects nanogram of His-tagged proteins directly in gels, thus eliminating the additional western blotting step. AAT Bioquest offers the largest selection of the His-Tag detection and purification products.

KEY PARAMETERS

Gel Imager

Excitation	Blue laser
Emission	Long path green filter (SYBR filter)

PREPARATION OF STOCK SOLUTIONS

Unless otherwise noted, all unused stock solutions should be divided into single-use aliquots and stored at -20 °C after preparation. Avoid repeated freeze-thaw cycles.

ProLite™ His-Tag Protein Gel Stain stock solution
Prepare a ProLite™ His-Tag Protein Gel Stain stock solution by adding 60 µL of DMSO to a vial of ProLite™ His-Tag Protein Gel Stain. **Note:** 1 vial of stock solution is suitable for two gels. Store any unused stock solution at -20 °C.

PREPARATION OF WORKING SOLUTION

ProLite™ His Tag Protein Gel Stain working solution
Prepare a ProLite™ His-Tag Protein Gel Stain working solution by adding 30 µL of ProLite™ His-Tag Protein Gel Stain stock solution to 30 mL of PBS. **Note:** Make enough working solution that the gel is completely immersed in the working solution. Do not reuse the working solution.

SAMPLE EXPERIMENTAL PROTOCOL

The following protocol should be used as a guideline.

Post-staining protocol

1. Run gels based on your standard protocol.
2. Place the gel in a suitable container, and fix the gel in a fixing solution for 60 minutes. **Note:** 40% ethanol + 10% acetic acid can be used as a fixing solution.
3. Wash the gel twice with ultra-pure water.
4. Incubate the gel in the ProLite™ His-Tag Protein Gel Stain working solution for 60 minutes. Be sure the gel is immersed in the working solution.
5. Remove the working solution and wash the gel twice with PBS.
6. Proceed to imaging the gel immediately.

EXAMPLE DATA ANALYSIS AND FIGURES

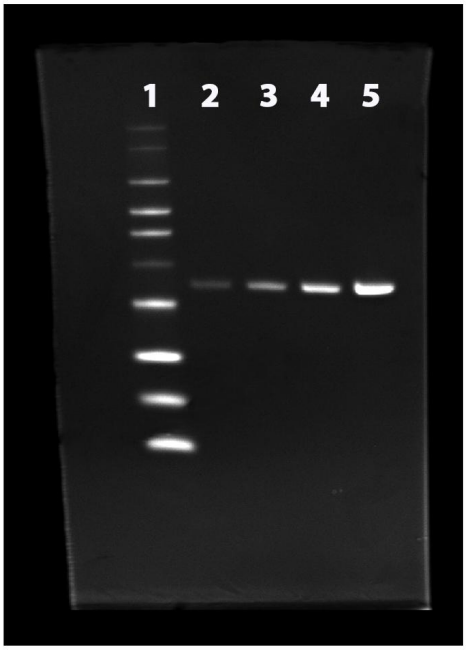

Figure 1. Two-fold dilution series of His-tagged annexin V were separated on a NuPAGE® 4–12% Bis-Tris gel and stained with the ProLite™ His-Tag Protein Gel Staining Kit according to standard protocols. **Lane 1:** His-tagged protein ladder, **Lane 2 to 5:** two-fold dilution of His-tagged annexin V.

DISCLAIMER

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