ProLite™ Orange Protein Gel Stain *5000X*

Catalog number: 18000, 18001
Unit size: 100 ul, 1 ml

Component	Storage	Amount (Cat No. 18000)	Amount (Cat No. 18001)
ProLite™ Orange Protein Gel Stain *5000X*	Freeze (< -15 °C), Minimize light exposure	100 µL	1 mL

OVERVIEW

Prolite™ Orange is an alternative protein stain that can be used to replace SYPRO Orange Protein Gel Stain (SYPRO is the trademark of ThermoFisher). Prolite™ Orange is a sensitive, ready-to-use fluorescent stain for total protein detection in 1D gels. The sensitivity of Prolite™ Orange is as good as or better than traditional silver staining techniques. Stained proteins can be viewed with a standard UV or blue-light transilluminator or imaging equipment containing the appropriate filters or lasers. Fluorescent stains are rapid, and highly sensitive for detecting total protein in protein electrophoresis gels and membranes. The Prolite™ Orange fluorescent stain can be used for total protein quantitation and can be viewed using a standard UV or blue-light transilluminator or with imaging instruments equipped with appropriate light sources.

AT A GLANCE

Storage and Handling
Store at -20 °C protected from light. Product is stable for at least 12 months from the date of receipt when stored as recommended. The ProLite™ Orange diluted in acetic acid or buffer can be stored in glass or plastic bottles at 4 °C for three months, protected from light. Before opening, each vial should be allowed to warm to room temperature and then briefly centrifuged in a microfuge to deposit the DMSO solution at the bottom of the vial. If dye particles are present, briefly sonicate the tube or vortex the tube vigorously.

Safety
We advise researchers to follow universal laboratory safety precautions when handling ProLite™ Orange dye.

PREPARATION OF WORKING SOLUTION

ProLite™ Orange solution (5000X)
Dilute the 5000X ProLite™ Orange stock solution to make 1X ProLite™ Orange stock solution using 7.5% (v/v) acetic acid and mix vigorously.

Note The working solution can be reused up to four times. However, we observed significant reduction in response after the second reuse. It's highly recommended to use fresh working solution for the optimal result.

SAMPLE EXPERIMENTAL PROTOCOL

The following protocol is recommended and can be used as guideline. However some comparisons might be needed to determine which one better meets your needs.

Staining Proteins after Electrophoresis

1. Run gels as per your protocols.
2. Pour the working solution into a small plastic dish.

   Note For one to two standard size minigels, use about 50 mL of working solution. For larger gels, use between 500 to 700 mL of working solution.

   Note Make sure to add enough working to completely immerse the gels.
3. Place the gel into the working solution.

   Note Cover the container with aluminum foil to protect the dye from light.
4. Gently agitate the gel at room temperature for 10 to 60 minutes.
5. Rinse briefly with 7.5% acetic acid.
6. Gels may be visualized on a standard 300 nm UV transilluminator or with a blue-light transilluminator.
7. Destaining: Gels can be mostly destained by incubation overnight in 0.1% Tween® 20. Alternatively, incubation in several changes of 7.5% acetic acid will eventually remove all of the stain.

EXAMPLE DATA ANALYSIS AND FIGURES

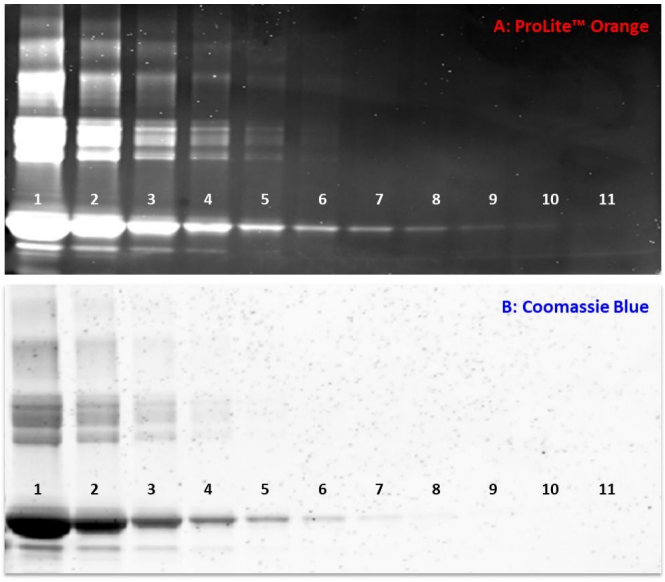

Figure 1. Three-fold dilution series of BSA standards were separated on a NuPAGE® 4–12% Bis-Tris gel, and stained with A) SYPRO Orange gel stain, B) Coomassie brilliant blue (CBB) according to standard protocols. The ProLite™ Orange stained gels were photographed using SYPRO Orange filter. The CBB-stained gels were photographed using transmitted white light without optical filter.
Lane 1: 15ug, Lane 7: ~20ng, Lane 10: ~0.8 ng BSA.

DISCLAIMER

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