

Lumitein™ Protein Gel Stain 1X

A luminescent dye designed for detecting proteins in SDS polyacrylamide (SDS-PAGE) gels. As sensitive as silver stain.



Product attributes

Excitation/Emission	280, 450 (broad)/610 nm
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Product Description

Lumitein™ is a luminescent dye designed for detecting proteins in SDS polyacrylamide (SDS-PAGE) gels, and can also be used to detect proteins in native PAGE gels after an additional SDS incubation step. The stain combines excellent sensitivity, user-friendliness and compatibility with common instruments and downstream analysis. Lumitein™ is as sensitive as silver stain, detecting 1 ng or less protein. For faster, non-toxic alternatives to Lumitein™ for protein gel staining, see our [One-Step Lumitein™ and One-Step Blue™ Protein Gel Stains](#).

- As sensitive as silver stain, detecting < 1 ng protein.
- Simple staining procedure.
- Image with UV gel box (EtBr filter) or laser scanner.
- Wide linear detection range.
- Compatible with Downstream Analysis such as mass spec and sequencing.
- Stable at room temperature.
- 200 mL, 1 L, and 5 L sizes.

Lumitein™ Protein Gel Stain, 1X is a convenient, ready-to-use staining solution. Lumitein is also available as an economical 100X concentrated solution (catalog no. [21002](#)).

Lumitein™ sensitivity

Lumitein™ is as sensitive as the best silver stain by detecting 1 ng or less protein (Figure 1). Unlike silver stain, however, Lumitein™ has a linear detection range of at least 3 orders of magnitude. It is among the simplest protein gel stain by staining protein in gels in 90 minutes or less time without a separate fixation step. Lumitein™ has an excitation spectrum that makes detection possible with either a simple UV box or a high-end laser scanner. Moreover, protein gel staining with Lumitein™ is compatible with downstream protein analyses such as mass spectrometry and Edman-based sequencing (Figure 2).

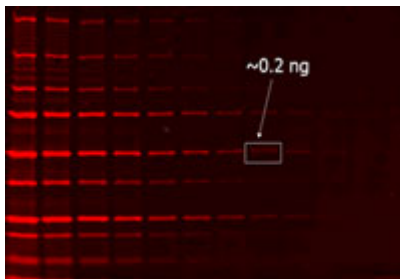


Figure 1. Two-fold serial dilutions of protein marker were separated via SDS-PAGE and then stained with Lumitein™. Imaged with a GE Typhoon Trio using 532 nm excitation and 610BP30 emission filter.

Lumitein™ vs. Coomassie

Lumitein™

Figure 3. PAGE gels containing electrophoretically separated protein marker (loaded in two-fold serial dilution from left to right) were stained with Lumitein™ protein gel stain (left) and Coomassie Blue (right). The Lumitein™-stained gel was imaged using a UV box equipped with EtBr filter (UVP) while the Coomassie-stained gel was imaged using a white light converter (UVP).