SignalView CL

YamayBio

Imaging System

Broad Range · High Sensitivity · Intelligent Software · Streamlined Workflow

Purpose-Built for Chemiluminescence



Casting
GelMaster46
Gel Casting System

Transfer
Max8
Blot Transfer System

Processing
AutoBlot4
Blot Processor

Imaging
SignalView CL
Imaging System

The **SignalView CL** Imaging System is engineered for sensitive and reliable chemiluminescence imaging. Its Scientific CMOS (sCMOS) detector combines high quantum efficiency with low read noise to improve detection of weak signals, while four-stage Peltier cooling reduces dark current and thermal noise for cleaner backgrounds and stable performance during long exposures. With a broad linear dynamic range, high sensitivity, and intuitive software, SignalView CL supports accurate quantification and streamlines chemiluminescence imaging to improve workflow efficiency and consistency from image capture to analysis.

KEY FEATURES

Broad Linear Dynamic Range

Achieve reliable quantitative accuracy across diverse sample concentrations. The system exhibits an outstanding linear correlation across a nearly 1000-fold serial dilution range (20.48 to 0.02 µg). This broad linear range helps minimize signal saturation and supports reliable Western blot densitometry and relative quantification.

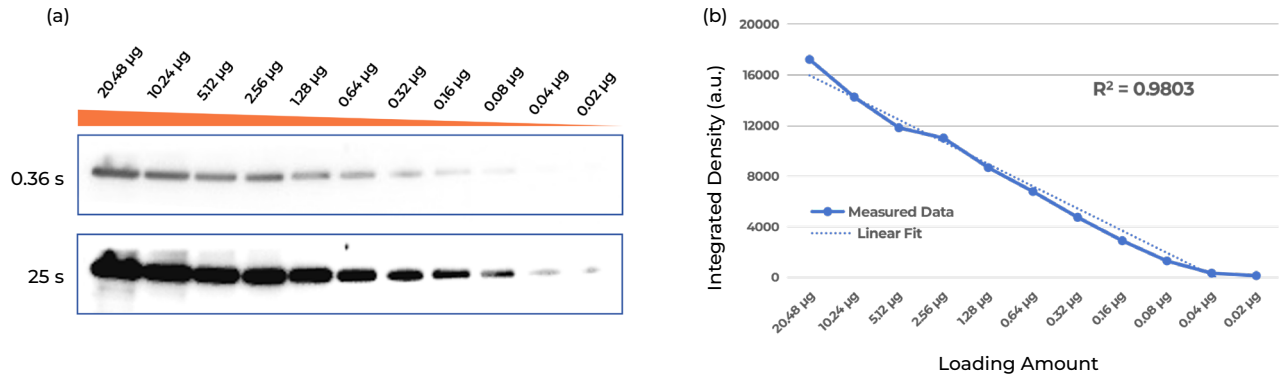


Figure 1: HeLa Cell Lysate Serial Dilution and Linearity Analysis. (a.) HeLa cell lysates were separated on a 4–20%, 15-well Bis-Tris precast gel at loading amounts ranging from 20.48 to 0.02 µg per lane. Proteins were probed with an anti-GAPDH rabbit mAb followed by an HRP-conjugated anti-rabbit IgG. (b.) Signal intensity calculated from the 25 s exposure showed a linear correlation across the 1000-fold dilution range (R^2 = 0.9803), with bands detectable at 0.02 µg.

Ultra-High Sensitivity

SignalView CL provides high sensitivity for detecting faint chemiluminescent signals. Distinct target bands remain visible at loading amounts as low as 0.02 µg for cell lysates (see Figure 1) and 0.128 ng for recombinant proteins (see Figure 2), supporting reliable detection of low-abundance targets.

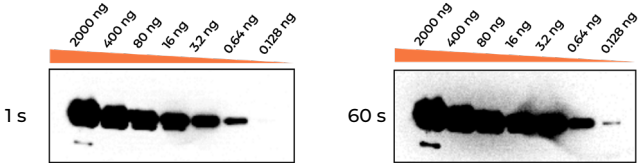


Figure 2: Recombinant GFP-FLAG Protein Serial Dilution Assay. Proteins were separated on a 12% Bis-Tris precast gel with serial dilutions from 2000 to 0.128 ng per lane. Proteins were detected using an HRP-conjugated mouse anti-FLAG antibody. Blots were imaged at 1 s and 60 s exposure times, with distinct bands observable even at the lowest loading amount of 0.128 ng with a 60 s exposure.

Intelligent Software & Streamlined Workflow

Flexible Exposure Modes — Single and multiple exposure options with automatic or manual control for imaging both strong and weak signals.

One-Touch Imaging — Capture chemiluminescence, marker, and overlay images in a streamlined workflow.

Easy Image Adjustment — Quickly rotate and adjust images with intuitive controls.

Integrated Image Gallery — Save and reopen original image files at any time.

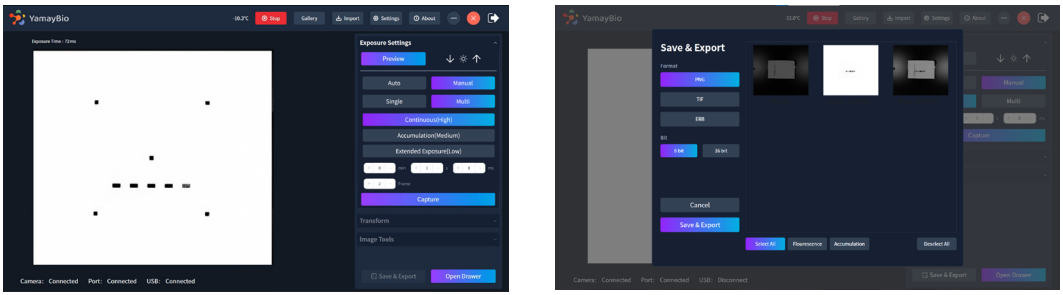


Figure 3: Software Interface. The software provides efficient image capture, processing, and export.

Specifications

Feature	Specification
Applications	Chemiluminescence-based Western blot, Southern blot, Northern blot, Dot blot, and selected protein array applications.
Detector	15 MP sCMOS, 4/3-inch; 3.8 × 3.8 µm pixel size
Sensor Performance	95% QE; 1.0 e- RMS; 16-bit (65,535 grayscale levels)
Lens	25 mm F/0.95
Image Area	17 × 19 cm maximum
Binning	2 × 2, 4 × 4, 8 × 8
Cooling	Four-stage Peltier, -30 °C at 25 °C ambient
Display	13.3-inch HD touchscreen; 1920 × 1080 resolution
Data Output	PNG, TIF, ERB; 8-bit / 16-bit
Dimensions (W × D × H) & Weight	33.1 × 45.0 × 37 cm (13.0 × 17.7 × 14.6 in); 24.2 kg (53.4 lb)
Power Supply	AC 80–264 V, 47–63 Hz, 200 VA max.

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