Solutions for Advanced Scientific Research

Laboratory Software, Imagers, Reagents, and Accessories

LI-COR

Empiria Studio Software
Expert Analysis Made Simple

Empiria Studio Software is a post-processing, Data Integrity Software for quantitative data analysis. Created in partnership with high impact journals, Empiria Studio provides key advantages over signal identification software—such as step-by-step workflows, validation and analysis features, assay development tools, and shareable files for easy collaboration.

Outperform with Data Integrity Software

A signal identification software only identifies an image's signal levels. As the only available Data Integrity Software, Empiria Studio quantifies signal levels using raw pixel intensity and provides expert data analysis. It incorporates publishers' best practices and systematic workflows for faster, consistent, and more reliable results among all users. When compared to a signal identification software, Empiria Studio users achieve a significantly lower % CV and complete their analyses in less time.

Step-By-Step Workflows

Empiria Studio's workflows are based on industry best practices and designed to walk lab members of all experience levels through the validation, analysis, replicability, and publication stages of quantitative data analysis. This step-by-step process ensures consistency in and the reliability of each researcher's results. In particular, they also help develop and optimize In-Cell Western™ Assays with key steps—such as antibody titration, blocker evaluation, cell stain linearity, and target analysis.

With the Empiria Studio Experiment Designer, you can even design an experimental microplate map in Empiria Studio. This feature helps chart your microplates well-by-well, so you know which ones contain positive and negative controls, background, and treatments. Together, the workflows and a new Template Library and Emperiment Designer make setup and data analysis easier than ever before.
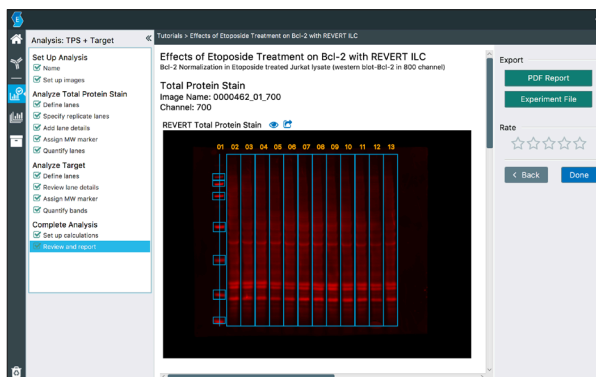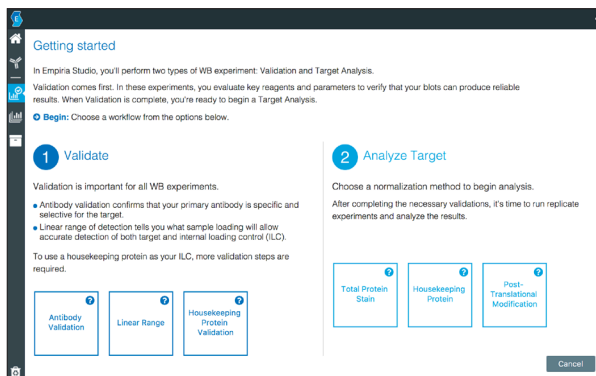
Get a free trial at licor.com/empiria

Odyssey M Imager

Seek Discovery and Leave Limitations Behind with M

The Odyssey M Imager is the most powerful imager currently offered for fluorescent (i.e., near-infrared (NIR) and visible), luminescent, and white light imaging. With high precision and sensitivity, the Odyssey M Imager is all encompassing for even the most advanced research initiatives.

Expand Research Versatility

While other imagers have limited versatility, the Odyssey M Imager is equipped to image a vast range of experiments—such as tissue sections, membranes, plate-based assays (e.g., In-Cell Western Assays, ELISA assays, and cell health assays), and gels (e.g., EMSA and DNA and protein gels). This versatility enables it to expand and grow over the years with your research initiatives, saving time and money on additional or replacement imagers.

- Images up to eighteen channel combinations

- Uses an industry-leading 5-µm resolution for precise, detailed imaging

- Integrates with an optional luminescent module

Secure Publishable Data Images

The Odyssey M Imager works jointly with LI-COR Acquisition Software, which is responsible for organizing and preserving raw image data that can then be imported into Empiria Studio. The software also includes step-by-step workflows that walk users through image acquisition to ensure that the results are uniform from person to person. Unlike other imaging software, LI-COR Acquisition Software is intended to ultimately ensure user-to-user consistency, data replicability, and publishable results.

- Tags images with their assay types for easy organization

- Retains raw data images to meet publication guidelines

- Allows for routine image adjustments (e.g., crop, rotate, and flip)

Odyssey M Imager Key Specifications

Optical System

Image Area:
Total Image Area:
25 cm W × 18 cm D (9.8" W × 7.1" D)
Image Area of Chemi Region:
15 cm W × 11 cm D (5.9" W × 4.3" D)

Pixel Resolution: 5, 10, 20, 50, or 100 µm

Dynamic Range*:
>6 logs for chemiluminescence (optional) and fluorescence

Detectors:
sCMOS image sensor
Sensor for chemiluminescence:
CCD (pixel size 6.45 µm)

Laser Lifetime:
685 nm and 785 nm: 20,000 hours
488 nm and 520 nm: 40,000 hours
Class 1 Laser Product

Light Sources:
RGB LED (trans-illumination)
RGB LED (reflective illumination)
Solid-state diode laser at 488 nm
Solid-state diode laser at 520 nm
Solid-state diode laser at 685 nm
Solid-state diode laser at 785 nm

Focusing:
Microscope is adjustable -1.00 to 5.00 mm above the scan bed to obtain best signal-to-noise ratio.

Size and Weight

Dimensions (Instrument Only):
61 cm W × 76 cm D × 38 cm H
(24" W × 30" D × 15" H)
Height with hood fully open:
71 cm (28")

Weight:
55 kg (121 lbs) w/ chemiluminescence module
52 kg (115 lbs) w/o chemiluminescence module

Software Specifications

LI-COR Acquisition Software
Operating System
Windows 10 (64 bit)
Memory
Minimum 16 GB
Hard Drive
Solid state

Empiria Studio Software
Operating System
Windows 10 (64 bit)
Mac OS Mojave or Catalina
Memory
Minimum 8 GB

*This dynamic range is obtained in a single acquisition. Specifications subject to change without notice.

Learn more about the Odyssey M Imager at **licor.com/bio/odyssey-m**