Empiria Studio® Software Quick Start Guide

LI-COR®

Where to begin

The following points will help get you started using Empiria Studio software.

Create account

If you haven't already created a LI-COR account, visit licor.com/GetEmpiria to create one. You will be able to purchase Empiria Studio after creating your account (if you haven't already).

Download and install

You can download Empiria Studio at licor.com/EmpiriaStudioDownload.

Note: Ensure you have the correct permissions to install software on the computer you want to use.

Register

After installing and starting Empiria Studio, you will be asked to register your software.

To begin using Empiria Studio, you will need to **register** by entering you LI-COR account **email** and **password**.

Choose Data Folder

When you first start Empiria Studio, you will be asked to create a Data Folder. The Data Folder is where Empiria Studio software application data will be saved.

Follow the recommendations on the Data Folder options page to choose an appropriate Data Folder.

Note: After choosing a Data Folder, do not add files to it or edit its contents.

Import images and use the Image Gallery

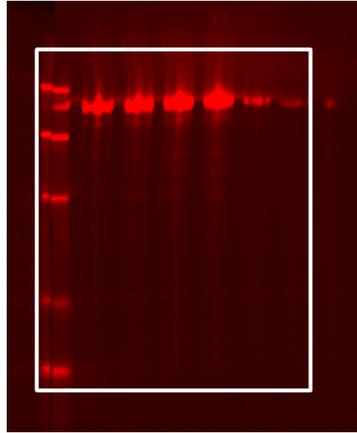Choose the images you want to analyze at the beginning of each workflow.

- If you have Image Studio™ Software installed on the same computer as Empiria Studio, you can import images acquired using Image Studio by browsing Image Studio Work Areas in Empiria Studio.
- You can also export Zip Files from Image Studio and import them using the Zip File option in Empiria Studio. Use this method if you have Image Studio and Empiria Studio on different computers.
- Once you have imported images into Empiria Studio using the Zip File option or Work Area option, the images will be available in your Empiria Studio Image Gallery for further analysis.
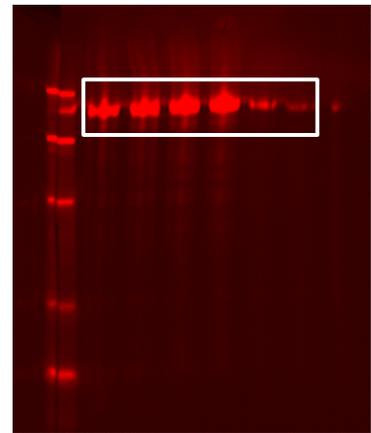
Define lanes

On the Define lanes page of Empiria Studio workflows, draw a boundary region around the lanes on your image.

- The boundary must include some of the surrounding lane area, above and below your band(s) of interest. This lane context information is used for background correction.
- Be sure to include all the lanes when you define the boundary, even if you do not plan to use all the lanes for your analysis. You can choose Not Used as the lane type for lanes you do not want to use.

✅ **Correct Placement** ❌ **Incorrect Placement**

Validate

Validation is important for all Western blot experiments.

- Antibody validation confirms that your primary antibody is specific and selective for the target.
- Linear range of detection tells you what sample loading will allow accurate detection of both target and internal loading control (ILC).

To use a housekeeping protein as your ILC, more validation steps are required.

Target Analysis

Choose the type of internal loading control (ILC) you used in your experiment, then quantify the ILC and target signals on your blot. Empiria Studio will automatically normalize the target results, using the ILC to correct for lane-to-lane variation.

Replicate analysis

Use a Replicate Analysis 📊 to compare replicate blots and get vital statistical values, such as standard deviation and coefficient of variation.

Share

When you're done validating, analyzing your target, and comparing replicates, you can share all your data in a single files using a Publication Pack 🗂.