



ImageQuant LAS 4000 mini Biomolecular Imager from GE Healthcare

1. Introduction

A Biomolecular Imager located at the main laboratory of IBEC at the Hèlix building is available for use by all IBEC researchers.



ImageQuant LAS 4000 mini is a dedicated CCD camera system for sensitive, quantitative imaging of gels and blots by chemiluminescence and white epi-illumination gel documentation. The system bought by IBEC also has a blue epi-fluorescence module.

Imaging applications:

- **Quantitative Western blotting:** The high sensitivity of the system is designed to capture the chemiluminescent signals from Western blotting detection reagents for quantitative detection purposes.
- **Blue Fluorescence (460 nm):** An epi-blue source for fluorescence allows the detection of reagents such as Amersham ECL Plus, FITC, FAM, SYBR Green, EGFP, and SYPRO Ruby.
- **Gel documentation:** Imaging of opaque stains such as Coomassie Blue, silver stain, and Amersham RainbowTM markers is achieved by epi-white illumination. An opaque marker image can be automatically captured and presented together with a chemiluminescent image, facilitating comparison of the marker with the chemiluminescent signal from the sample.



	Chemiluminescence	Fluorescence via blue epi-illuminator (460 nm)	Gel documentation via white epi-illuminator
Detection Reagents	Amersham ECL Amersham ECL Prime Amersham ECL Plus Amersham ECL Advance	Alexa Fluor™ 488 Cy™2 SYBR™ Green I & II SYBR Gold SYPRO Ruby SYPRO Orange FITC FAM™ EGFP ECFP AttoPhos™ Pro-Q™ Emerald 488	Silver CBB NBT/BCIP X-ray film

To find out more information about the ImageQuant LAS 4000 mini, please visit the GE Healthcare website at www.gelifesciences.com.

2. User Pre-requisites

- **Only IBEC researchers can use the ImageQuant LAS 4000 mini.**
- Before using the ImageQuant LAS 4000 mini you must obtain an individual account on the equipment computer. To obtain it, please contact the Core Facilities staff at corefacilities@ibecbarcelona.eu.
- With your personal user name and password you can access the computer locally to run the instrument or from your personal computer to retrieve your data.

You must not disclose your password to any person who is not authorized to use the instrument.

3. Reservations

- To access the instrument, you have to book it previously using the online booking application.
- If you are 30 minutes late after the start of the booking-time the whole reservation is considered cancelled and the equipment is available to everybody.



- Appointments that cannot be held must be cancelled as early as possible in order to free up the slots for other users.

4. Usage Rules

- Do not operate the ImageQuant LAS 4000 mini in any other way than described in the user documentation.
- Do not leave samples in the equipment after exposure.
- Once finished your experiment:
 1. Log off your session on the computer.
 2. Turn off the ImageQuant LAS 4000 mini power switch.
 3. Remove your sample from the tray of the ImageQuant LAS 4000 mini.
 4. Clean the tray with water. After cleaning leave the tray to air dry.
 5. Finally, leave the area around the machine cleaned.

5. Data storage and retrieval

- **All Your files must be saved to the location indicated to you:**
 1. Click on “**My computer**”, then on “**Local disk (C:)**”.
 2. Access the “**SHARING**” directory to enter your personal folder.In order to make the access to your personal folder easier you can create a shortcut of it on your desktop.
- Notice that files stored in other areas are subjected to possible deletion.
- **The use of a USB to retrieve your data is not recommended**, instead you can access to the computer using the local area network to do so:
 1. Use the following IP address on the Internet Explorer: \\10.6.46.47
 2. Access the directory “**SHARING**”.
 3. Enter your personal folder, using your username and password.

6. General

- If you have any problems with the ImageQuant LAS 4000 mini, please report them to Core Facilities Unit at corefacilities@ibecbarcelona.eu .