Amersham ImageQuant™ 800 biomolecular imager

IMAGING SYSTEMS, SOFTWARE, AND ACCESSORIES

ImageQuant™ 800 systems are a new generation of highly sensitive and robust charge-coupled device (CCD) imagers for capture of high-quality images in life science applications (Fig 1). This new range of systems is ideal for chemiluminescence, fluorescence, and colorimetric imaging of a wide variety of samples, including gels, membrane blots, multiwell plates, and petri dishes. Improved optics along with the new SNOW™ (signal-to-noise optimization watch) detection mode allows users to increase both sensitivity and image quality. The system combines an intuitive control software along with ImageQuant CONNECT software, a connection tool which allows access to the imager from remote locations over the network.

Key benefits of ImageQuant 800 systems

- **Sensitivity and image quality:** Detect both the weakest and strongest bands without compromising quality using the novel SNOW imaging mode. A Fujifilm™ large aperture lens with improved transmission combined with a high-resolution CCD detector allows for unmatched image quality and sensitivity.
- **Confidence in your image submission:** the authenticity of raw data images from ImageQuant 800 can be verified with free of charge Image Integrity Checker software.
- **Versatility:** The system works for a variety of applications and samples, making it ideal for multi-user labs. Now you can image across the full spectrum, including infrared (IR) long and IR short wavelengths (650 to 850 nm). Acquire color marker images automatically with blots, and image multiwell plates and petri dishes with our special accessories designed for artifact-free imaging.
- **Flexibility:** A built-in touchscreen and mini external computer result in a small footprint without compromising flexibility. Use the ImageQuant CONNECT software to remotely check the status of systems in the facility and reserve imagers for your experiments.
- **Optional GxP software extension:** To meet requirements of regulations like 21 CFR Part 11 and EU GMP Annex 11, the ImageQuant 800 GxP module was specifically designed for controlled environments like biopharamaceutical QC labs where data traceability and integrity are critical.

1. Touchscreen
2. System power and status indicator
3. Door
4. Filter access door
5. Power button

Fig 1. The ImageQuant 800 imaging system comes equipped with touchscreen, two tray positions, and an easy-access filter door.

System description

ImageQuant 800 systems are equipped with a large, bright 12.1-inch touchscreen, dark sample cabinet with two tray positions, cooled CCD-based camera system, filter wheel, and light-emitting diode (LED) light sources. The system is controlled using a mini external computer which neatly fits at the rear of the system (Fig 2), reducing footprint without compromising functionality — ideal for multi-user labs with limited bench space. ImageQuant 800 systems have an easy-access side filter door for users to add their own customized fluorescent filters based on specific application needs.

Table 1. ImageQuant 800 system configurations and applications

Applications	Light sources	ImageQuant 800	ImageQuant 800 UV	ImageQuant 800 OD	ImageQuant 800 Fluor
Chemiluminescence with color marker overlay	Epi-white	√	√	√	√
Gel documentation	Epi-white	√	√	√	√
Stained gels	Epi-UV		√	√	√
Optical density (OD) measurements	Trans-white			√	√
RGB fluorescence imaging of blots and gels	Epi-RGB				√
IR short and IR long fluorescence imaging of blots	Epi-IR short, Epi-IR long				√
GxP software extension for regulated environments (optional)		√	√	√	√

1 Power button
2 External mini PC
3 Cable organizer

Fig 2. There is a mini external computer attached to the back of the ImageQuant 800 imager, reducing the footprint without compromising functionality.

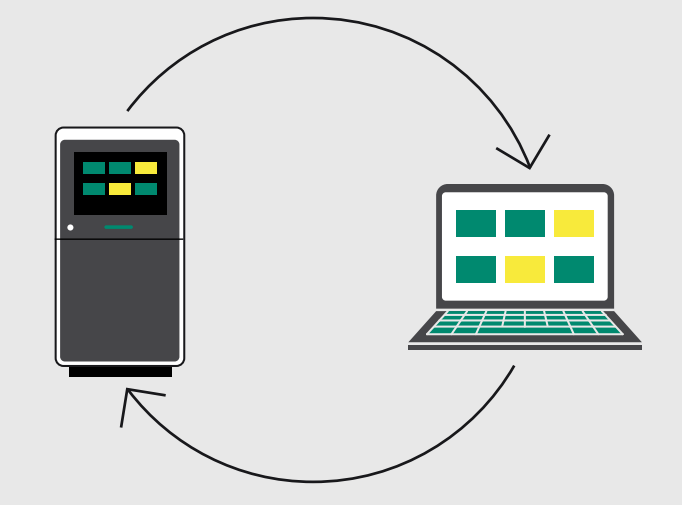


Fig 3. Use ImageQuant CONNECT software from your office to access images and the scheduler tool on board the instrument.

Light sources

With pre-set LED light sources and filters, ImageQuant 800 systems can be used for a wide variety of applications. The different models are fully upgradable between one another and choosing light sources and filters is also flexible (Table 1). All configurations are capable of chemiluminescence with color marker imaging, along with gel documentation applications. Other models include: trans-white for optical density measurements; ultraviolet (UV) and/or red, green, and blue (RGB); and IR short and IR long epi-illumination for fluorescence detection. Optical density measurements are factory calibrated for quantitation when used in colorimetric staining applications.

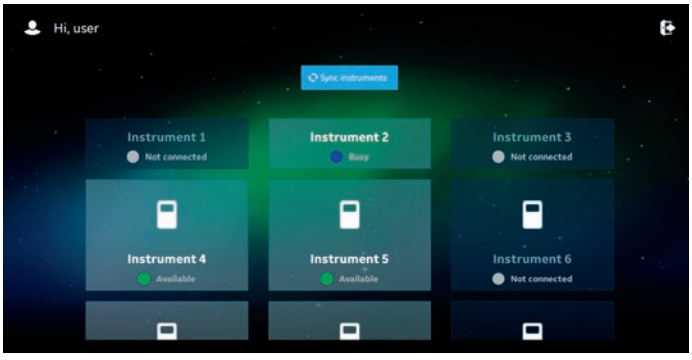


Fig 4. The ImageQuant CONNECT tool can be used to view the status of all the Amersham ImageQuant 800 instruments connected to the same local network in your facility. This capability allows you to choose an available instrument and plan your experiments.

Schedule experiments and access your system remotely using ImageQuant CONNECT

Amersham™ ImageQuant 800 systems are not only sensitive and versatile, they are also easy to use with convenient, time-saving features like the on-board scheduler and ImageQuant CONNECT software (Figs 3–5). Using this tool, you can view system status, plan your experiments, and download images stored on the system remotely from your office via the local area network connection.

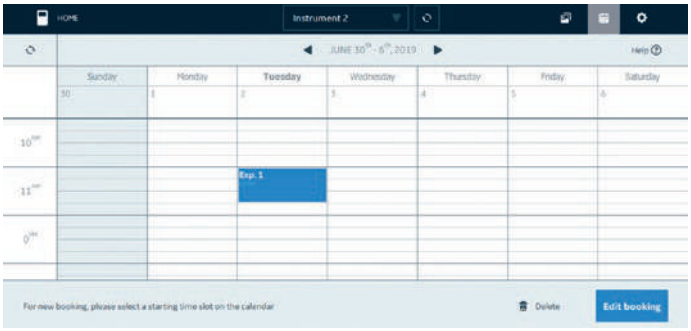


Fig 5. Perfect for a busy multi-user lab environment, the on-board scheduler application can be used to block time on the instrument to plan and run your experiment. Easily access the scheduler from your office via the remote ImageQuant CONNECT software to view and manage bookings.

Flexible upgrade paths

Each ImageQuant 800 model can be upgraded to include additional functions (Table 2).

Table 2. Modules available for ImageQuant 800 system upgrades

Upgrade module	Function
UV	Adds UV fluorescence functionality to ImageQuant 800 imager
OD	Adds OD functionality to ImageQuant 800 UV imager
RGB	Adds RGB fluorescence functionality to ImageQuant 800 UV or ImageQuant 800 OD imagers
Near-IR (NIR)	Adds IR long and IR short fluorescence functionality to ImageQuant 800 UV or ImageQuant 800 OD imagers

Optics and CCD sensor

ImageQuant 800 systems are fitted with a specially developed F 0.74 lens by Fujifilm (Fig 6). The large aperture lens was designed to enhance sensitivity for scientific applications such as chemiluminescence. The glass material used in the lens allows for up to two times higher transmittance of light (depending on wavelength), making it ideal for chemiluminescence imaging (Fig 7).

Fig 6. The large aperture Fujifilm lens of the Amersham ImageQuant 800 imager.

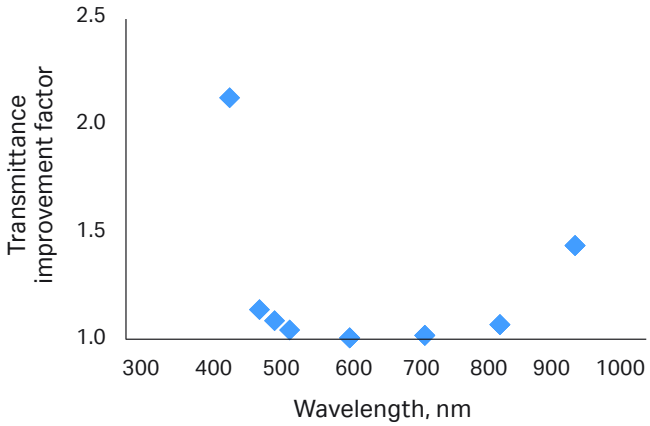


Fig 7. The use of new glass lens material in ImageQuant 800 has improved transmittance compared to previous Amersham imagers, particularly in the chemiluminescence wavelength range around 420 nm.

ImageQuant 800 systems come equipped with an 8.3 megapixel CCD chip that is ideal for imaging applications with long exposure times, such as chemiluminescence or weak signals from fluorescence. Additionally, on-chip binning provides maximum flexibility to achieve resolution and sensitivity.

As electric charge fills the pixels on the CCD chip, it is transferred to the serial register and read by converting the charge into a number that can be understood by the computer. During the readout process, signal is measured, and the presence of electrical noise causes variations in the measurement results. To reduce noise, ImageQuant 800 systems have a patented CCD technique developed by Fujifilm to improve the readout rates of electrons.

SNOW imaging mode for exceptional sensitivity and image quality

ImageQuant 800 is equipped with the SNOW imaging option, a novel exposure mode which allows users to achieve high sensitivity and unmatched image quality. Before the SNOW imaging mode was developed, exposure times in imaging systems have been set to either avoid saturation (e.g., high expression proteins) or maximize faint signals, limiting the dynamic range. Additionally, the variance of chemiluminescence signals over time often requires time-consuming optimization and analysis of images in time series.

SNOW detection mode captures several images at shorter exposure times, thereby avoiding saturation, and averages these images in real time to reduce noise. Users can follow the progress as the image updates continuously. The signal-to-noise ratio improvement for your selected region of interest is also updated in real time. Furthermore, the SNOW imaging mode can be set to stop when the maximum signal-to-noise ratio is achieved (Figs 8–9).

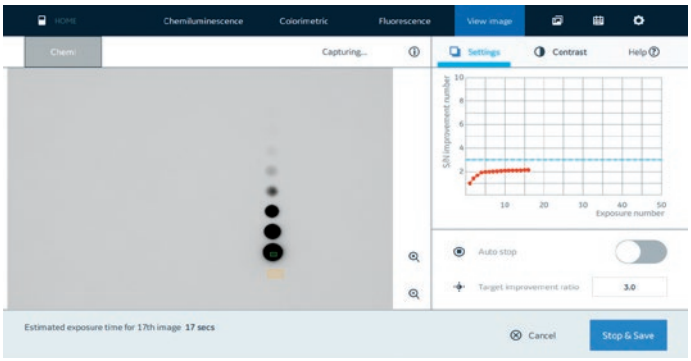


Fig 8. The SNOW control window shows continuous image updates and the progression of signal-to-noise ratio improvement for your selected region of interest. The SNOW exposure mode can be set to stop automatically or by the user.

Key benefits of SNOW imaging mode

- Achieve high sensitivity without compromising on resolution
- Detect more weak bands without saturating other bands in the blot
- Extend the linear dynamic range by avoiding saturation
- Auto-stop when the best possible image is acquired
- Eliminate time spent optimizing exposure time or capture setting

Sample:	Bovine serum albumin
Membrane:	Amersham Hybond™ P PVDF 0.2
Primary antibody:	Monoclonal anti-BSA antibody produced in mouse 1:25 000
Secondary antibody:	Anti-mouse IgG-1:300 000
Blocking buffer:	Western blot blocking buffer (fish gelatin)
Chemiluminescence detection reagent:	ECL Select (RPN2235)
Imaging:	SNOW in chemiluminescence mode on Amersham ImageQuant 800
Tray position:	Upper
Binning:	Default, 5×5

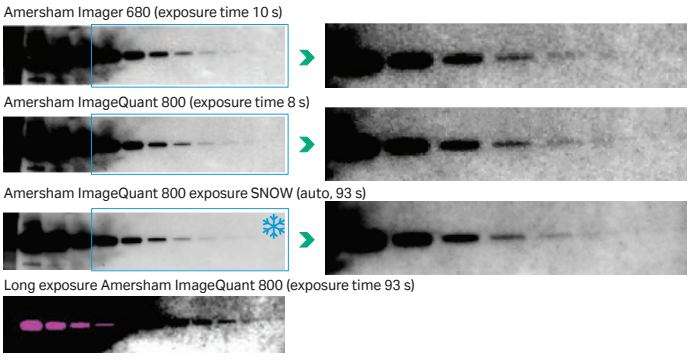


Fig 9. Intelligent SNOW detection algorithm in chemiluminescence mode dramatically improved the dynamic range and image quality by imaging weak bands without saturation of high intensity bands, enabling accurate quantitation of both strong and weak bands.

SNOW imaging allows the users to simply place samples into an ImageQuant 800 system and be confident that the best quality image will be acquired automatically. The noise-reduction algorithm built into the SNOW imaging mode helps achieve the highest sensitivity when you need it.

Sharp images

ImageQuant 800 systems with the 8.3 megapixel CCD chip allow users to capture high-resolution images of gels and blots (Fig 10).

ImageQuant 800 lower position **ImageQuant 800 upper position**

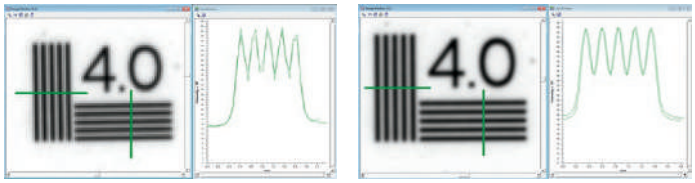


Fig 10. Epi-white imaging results in high-resolution images with excellent resolution. The four line-pair per mm pattern in a resolution test chart #2 (Applied Image, Inc.) shows clearly separated lines in both the lower and upper tray positions. The field of view in the upper position is 80 × 110 mm compared to 160 × 220 mm in the lower position.

Binning is a method of combining several pixels into a larger pixel during readout of the CCD sensor. The greater light-receiving area of a combined pixel enhances sensitivity. ImageQuant 800 systems are capable of seven different types of binning options from 1×1 (no binning), 2×2, 3×3, 4×4, 5×5, 8×8, and 16×16, providing users with the widest range of options based on application need (Fig 11). SNOW imaging makes it possible to look for the weakest bands, even with no (1×1) binning.

Fig 11. The CCD detector of ImageQuant 800 imager allows for on-chip binning. You can easily change default settings (5×5 for upper and 3×3 for lower tray position in chemiluminescence mode) using the slider. Low binning levels improve the resolution and high binning leads to shorter exposure times.

Versatility

ImageQuant 800 systems are truly adaptable, allowing users to image not only gels and blots but a wide variety of samples (Fig 12). This versatility makes an ImageQuant 800 imager ideal for multi-user environments accommodating many different types of samples and applications. Special accessories, such as the non-parallax (NP) lens, allow users to get artifact-free chemiluminescence images of petri dishes and multiwell plates (Figs 13–14).

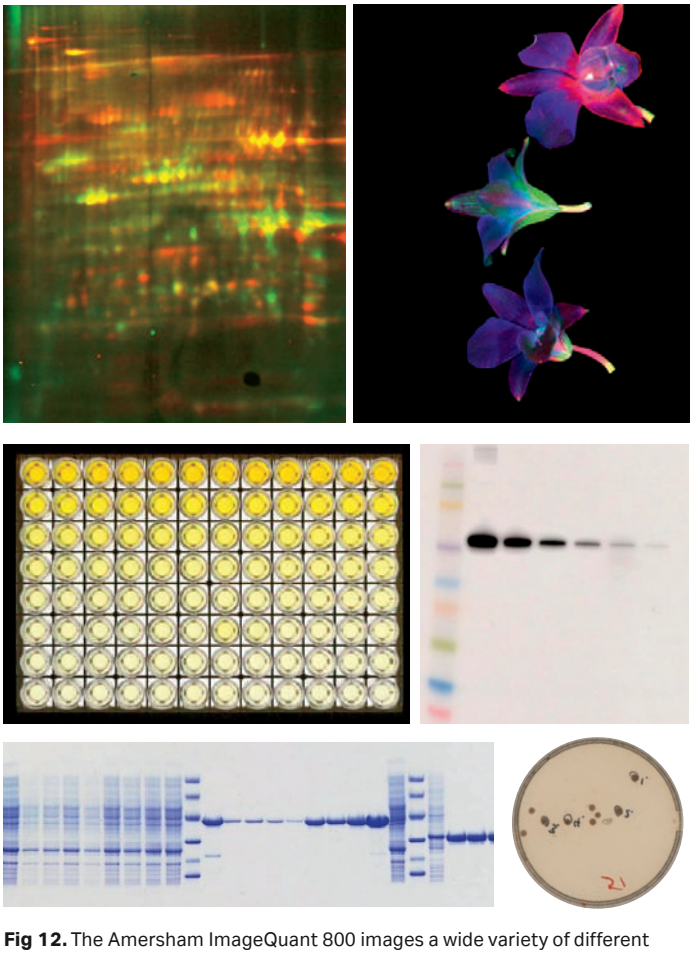


Fig 12. The Amersham ImageQuant 800 images a wide variety of different samples in multiple imaging modes.

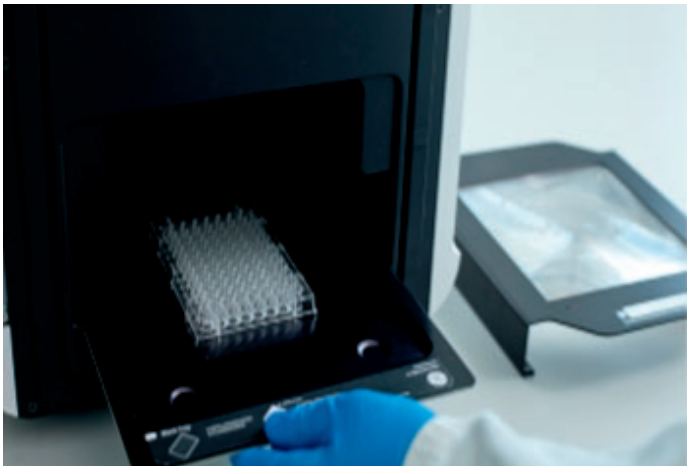


Fig 13. Use an NP lens to avoid optical artefacts (also called parallax errors) and avoid shadows caused by multiwell plates.

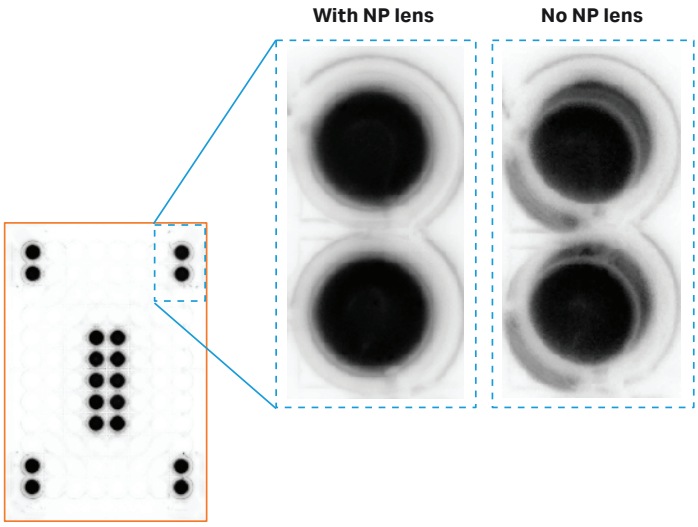


Fig 14. A chemiluminescent solution (ECL Select, 100 µL per well) in a transparent 96-well plate (Corning™) shows that the NP lens enables artifact-free imaging. Distortions and obscured imaging, and subsequently higher variation in the analysis, is evident in corner wells without the NP lens.

Imaging across the full spectrum

The ImageQuant 800 Fluor model is equipped with six different types of LED lights and filters so users can image across the full spectrum with various dyes (Figs 15–16). This system also provides users with the added flexibility of modifying LED light and filter combinations within the software, allowing for imaging various dyes with different excitation and emission wavelengths. Furthermore, the conveniently located side access door can be used to easily set up and accommodate custom filters from third parties.

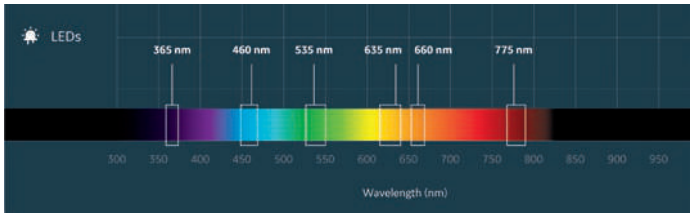


Fig 15. Image across the full spectrum with the different LED light sources of the ImageQuant 800 Fluor imager.

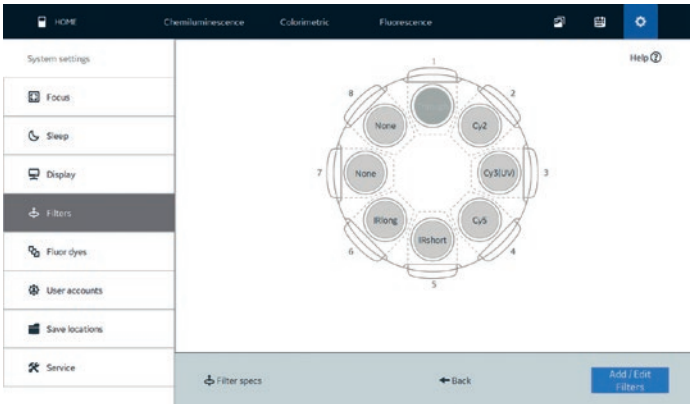


Fig 16. Follow the guided steps on the ImageQuant 800 software to easily set up custom filters or new LED-filter combinations for new dyes.

Image integrity

ImageQuant 800 is the first instrument of its kind that generates images with an encrypted digital fingerprint. This fingerprint is inspected in the Image Integrity Checker stand-alone software, generating a pass result and certificate of conformity if the image has not been modified in any way.

This compatibility with Image Integrity Checker is useful for both researchers and journal editors to validate the authenticity of data, submitted electronically by the scientific community for peer reviewed articles.

Regulated environments

The ImageQuant 800 GxP optional software extension module is designed to support labs with 21 CFR Part 11 and EU GMP Annex 11 requirements. Available across all configurations the optional ImageQuant 800 GxP software extension features includes:

- Secure Windows-based user login
- User groups with different roles
- Digital handshake to ensure image authenticity
- Event logs and unique image IDs to ensure data traceability and accountability
- Full documentation and validation support with validation support files, change control notifications, and an external assessment report

Together with ImageQuant TL GxP analysis software and IQOQ services, the ImageQuant 800 GxP can be used in controlled environments like a QC lab.

Applications

Chemiluminescence Western blot detection

Quantitative Western blotting requires a signal response that is proportional to the amount of protein present in a sample. A broad dynamic range with linear response allows you to simultaneously quantitate both high and low levels of proteins. The combination of Amersham ImageQuant 800 with either Amersham ECL™ Prime or Amersham ECL Select™ detection reagent results in a limit of detection in the nanogram range and excellent dynamic range (Fig 17).

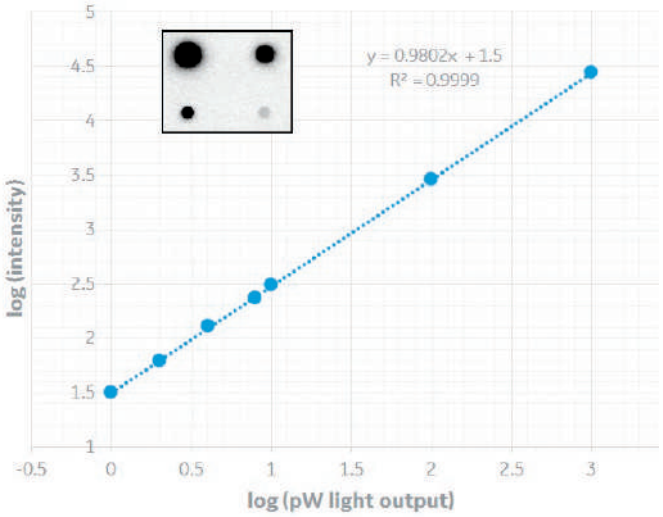


Fig 17. Amersham ImageQuant 800 imager exhibits excellent linear dynamic range. In this example, imaging of a calibrated luminescence plate in lower tray position, which emitted light power in the range 1 pW to 1 nW, showed linear response in recorded signal over the entire dynamic range. The inset image shows the 1 pW, 10 pW, 100 pW, and 1 nW light diodes (2, 4, and 8 pW not shown).

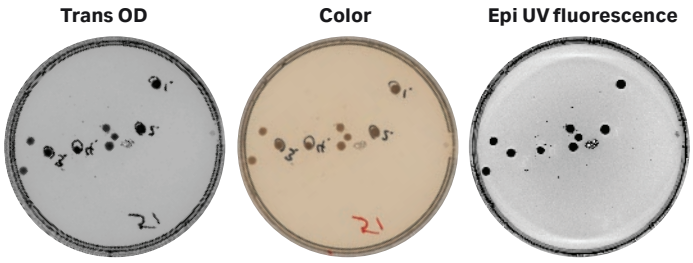


Fig 18. Different imaging modes are available for imaging of colonies on petri dishes. Optical density measurements (left) provide a direct measurement of the OD of each colony. It is also possible to get color images (middle) and do epi-fluorescence imaging. For example, UV-imaging (right) captured the auto-fluorescence of the cells. With the NP lens accessory, chemiluminescence imaging is also possible using an ImageQuant 800 imager.

Fluorescent Imaging

The Amersham ImageQuant 800 imager combined with Amersham ECL Plex™ Western blotting detection system (Cy™3 and Cy5) and Amersham CyDye™ 700 and 800 antibodies provide high-quality data in applications that demand high sensitivity over a wide dynamic range. With the addition of IR-short and IR-long capabilities, it is an optimal system for a wide range of multiplexing applications, such as the detection of several proteins at the same time or different proteins of similar size (Fig 19).

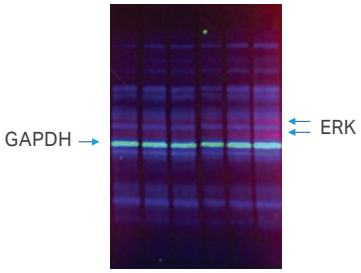


Fig 19. Three-color overlay image of Western blot nitrocellulose membrane. Target ERK proteins were detected using an IR long (red) LED-filter combination and GAPDH detection used an IR short channel (green). Lysates were pre-labeled with Cy3 (blue).

Sample:	CHO cell lysate in the range 16–24 µg was loaded in each lane
Membrane:	nitrocellulose from Cytiva

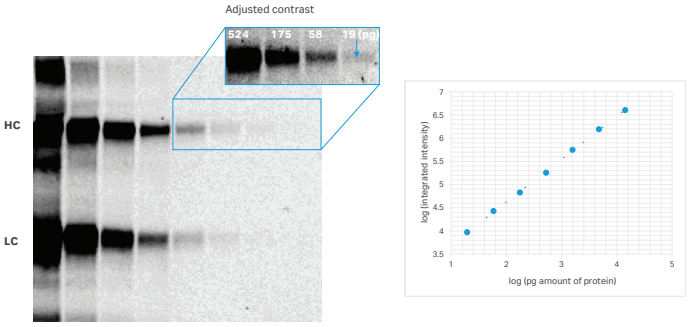


Fig 20. Dilution of Cy5 labeled antibody (Cytiva) separated on an SDS gel under reducing conditions and subsequently blotted to a polyvinylidene difluoride (PVDF) membrane (0.45 µm) in a Western blot experiment. The ImageQuant 800 image showed good linearity over three orders of magnitude. Furthermore, we also observed that highest resolution (1×1) could be used in SNOW mode (78 s) resulting in the same sensitivity (limits of detection [LOD] indicated by arrow -19 pg) as default binning in auto mode (data not shown).

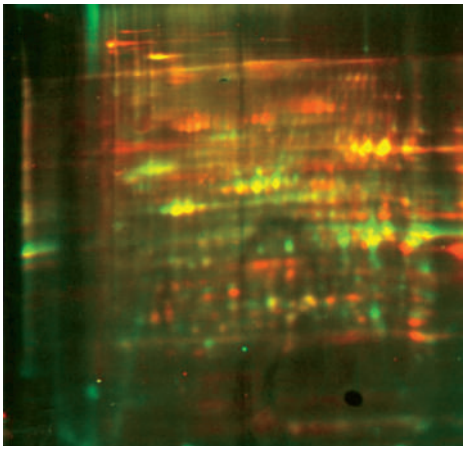


Fig 21. ImageQuant 800 system used for validating host cell protein (HCP) ELISAs with coverage assays, an essential part of biologics risk management. Coverage analysis by 2D differential in blot electrophoresis (DIBE™ technology) uses CyDye labeled HCPs and bound anti-HCP antibodies visualized through a CyDye secondary detection reagent. The HCPs and bound antibodies are detected in distinct channels on the same membrane, which reduces risk of misinterpretation and improves accuracy. Comparing the anti-HCP antibody signal to the total HCP present by identifying the matching spots provides an estimate of antibody-to-HCP coverage.

Sample:	CHO cell lysate
Membrane:	PVDF 0.45 µm pore size
Primary Ab:	DIBE™ CHO K1 HCP antibody 1:2000
Blocking:	DIBE blocking buffer
Detection reagents:	DIBE detection reagent Cy5 1:10 000
Imaging method:	Fluorescence Cy3 and Cy5 manual mode
Binning:	1×1

Effortlessly resolving target proteins from other proteins of similar molecular weight

Proteins may be visualized by treating a gel with a total protein stain after performing 1D or 2D electrophoresis. The most commonly used stain is Coomassie™ blue. The high-resolution camera in the Amersham ImageQuant 800 system can resolve even the most closely spaced bands, allowing accurate quantitation for critical applications (Fig 22).

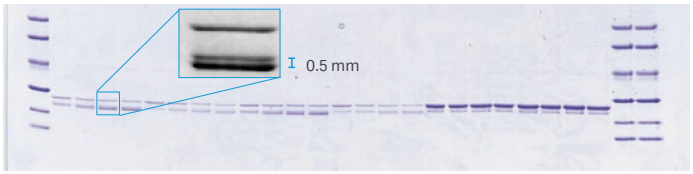
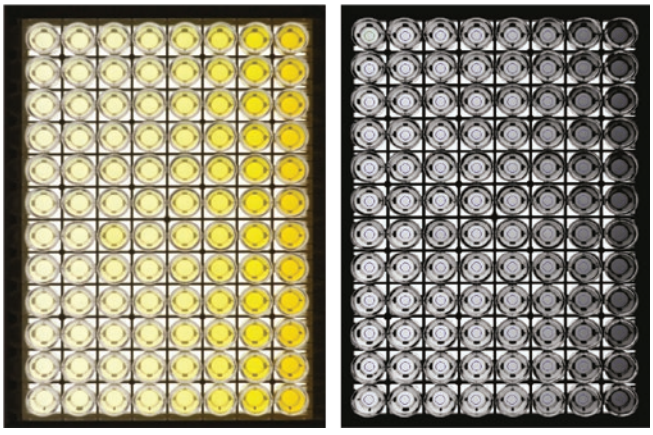


Fig 22. Colorimetric imaging with Amersham ImageQuant 800 imager results in high-resolution images for the most demanding applications. The zoom in of the Coomassie stained gels shows that it is possible to resolve bands on a gel which are only 0.5 mm apart. To be able to differentiate these bands was critical for research on self-cleaving tags.

Capture images from a wide variety of samples using the Amersham ImageQuant 800 system

With the new NP lens accessory, you can image multiwell plates with chemiluminescence assays with ease on the Amersham ImageQuant 800 system. The NP lens accessory eliminates parallax errors when using multiwell plates.



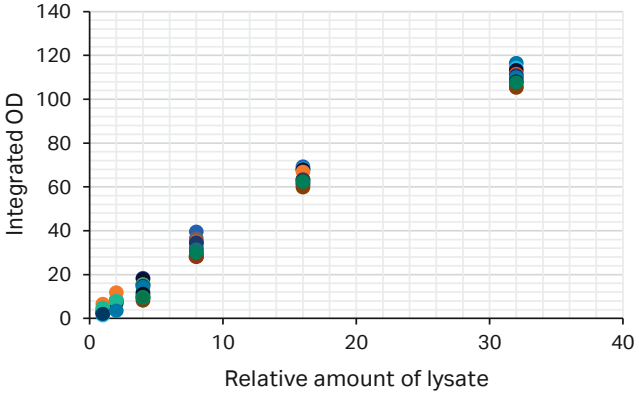


Fig 23. Amersham ImageQuant 800 imager and ImageQuant TL analysis software allows for a quick evaluation of HCP from CHO cells using the HCPQuant ELISA kit. Serial ½ dilutions of CHO cell lysates were detected using the HCPQuant ELISA kit. The white-light image (top left) shows the yellow color change upon detection of HCP proteins from CHO cells. If suitable reference samples are included on the plate, array analysis in ImageQuant TL (top right) and standard curve analysis can be used to determine the amount of host cell proteins.

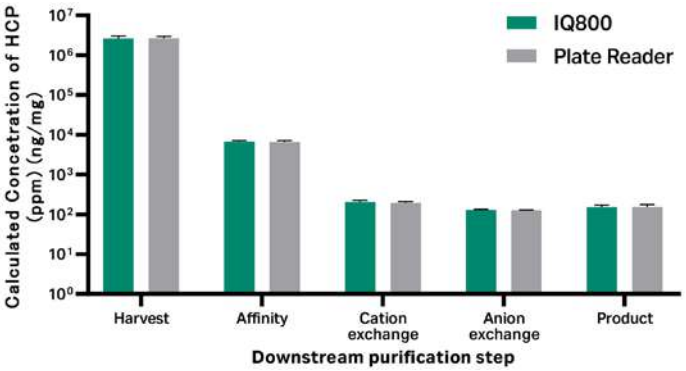


Fig 24. Samples from several in-process purification steps for a monoclonal antibody produced in a CHO-S cell line were measured for residual host cell protein (HCP) using the Amersham HCPQuant CHO (Supernatant) ELISA kit. ELISA plates were measured in ImageQuant 800 OD mode immediately after measurement on a plate reader (SpectraMax Plus 384, Molecular Devices). Image analysis was performed using ImageQuant TL software and calculated concentrations were converted to parts per million (ppm) relative to drug substance. No significant difference in calculated HCP concentration between the two methods was observed. Error bars represent standard deviation.

With the ability to image gels, blots, and a wide variety of samples, the Amersham ImageQuant 800 system is an adaptable option for multi-user lab environments.

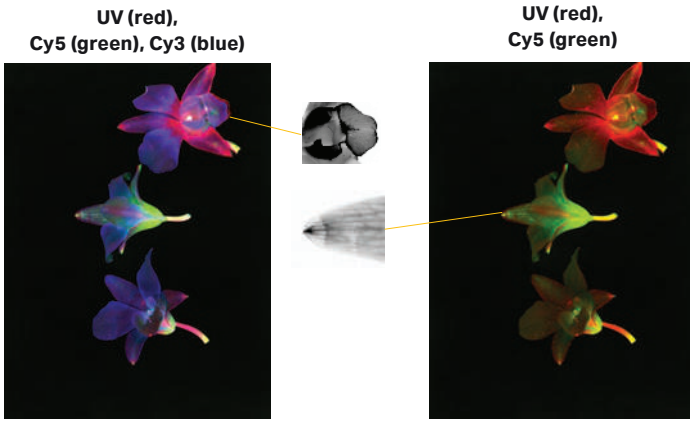


Fig 25. *Dendrobium nobile* orchid was imaged in the ImageQuant 800 system using different LED and filter combinations. Parts of the flower were seen to fluoresce under different excitation wavelengths. In this figure, we see the intricate vein-like pattern on the tips of the sepals' fluorescence under 635 nm excitation (red) wavelength. The lips of the flower fluoresce strongly in the 535 nm wavelength (green).

DNA imaging

Amersham ImageQuant 800 is designed for imaging of stained DNA in agarose gels, using either epi-UV or blue LED illumination, depending on the dye stain used. Thus, the user has full flexibility to choose the stain of choice, for example ethidium bromide, GelRed™, or SYBR™ Green. Take advantage of the excellent resolution of ImageQuant 800 to separate close-lying bands, and to identify small shifts in band positions which indicate chemical or physical changes of the DNA.

Samples:		
	lane 1:	Forward DNA ladder
	lane 2:	pcDNA3.1
	lane 3:	pUC19
	lane 4:	GeneRuler™ DNA ladder
Gel:		0.7% agarose
Stain:		GelRed nucleic acid gel stain
Imaging:		epi-UV (365 nm) and Cy3 (UV) BP filter
Binning:		1×1

Fig 26. A high-resolution 1×1 no binning image of different DNA vectors and ladders (all samples from Thermo Fisher Scientific).

Technical specifications

Table 3. Technical features of Amersham ImageQuant 800 models

Description	ImageQuant 800	ImageQuant 800 UV	ImageQuant 800 OD	ImageQuant 800 Fluor
Light sources				Epi-blue: 460 nm
				Epi-green: 535 nm
				Epi-red: 635 nm
				Epi-IR short: 660 nm
				Epi-IR long: 775 nm
		Epi-UV: 365 nm	Epi-UV: 365 nm	Epi-UV: 365 nm
	Epi-white: 470 to 656 nm	Epi-White: 470 to 656 nm	Epi-white: 470 to 656 nm	Epi-white: 470 to 656 nm
			Trans-white	Trans-white
Emission filters				Cy2: 525BP20
		Cy3 (UV): 605BP40	Cy3 (UV): 605BP40	Cy3 (UV): 605BP40
				Cy5: 705BP40
				IR short: 715BP30
				IR long: 836BP46
Lens	Fujifilm F 0.74 (calculated for infinite distance)			
CCD	8.3-megapixel high-resolution Peltier-cooled CCD			
Cooling	Two-stage thermoelectric module with air circulation			
CCD operating temperature	–25°C			
Cool down time	< 5 min			
Dynamic range	16-bit, 4.8 orders of magnitude			
Operation	Fully automated (auto exposure, no focus, adjustment or calibration needed)			
Capture modes	SNOW detection mode, auto with pre-capture, manual, and time series			
Exposure time	1/100 s to 10 h			
Pixel correction	Dark frame correction, flat frame correction, distortion correction, and blue shift correction			
Image output	Gray scale 16-bit .TIF, color Image .JPG, gray scale .JPG			
Field of view	160 × 220 mm			
Interface	Built-in 12.1-inch touch screen			
Controlled using	External computer Windows® 10 Pro or Enterprise (IoT)			
Dimensions	Width 360 mm × height 700 mm × depth 480 mm			
Weight	39 kg			
Input Voltage	100 to 240 V			
Voltage variation	+/- 10%			
Frequency	50/60 Hz			
Max power	250 W			
Operating temperature	18°C to 28°C			
Humidity	20% to 70% (no dew condensation)			

Ordering information

Amersham ImageQuant 800 instrument only (PC not included)

Description	Product code
Amersham ImageQuant 800	29399481
Amersham ImageQuant 800 UV	29399482
Amersham ImageQuant 800 OD	29399483
Amersham ImageQuant 800 Fluor	29399484

External mini computer + PC accessories for ImageQuant 800

Description	Product code
ImageQuant 800 Mini PC & accessories	29428373

Optional ImageQuant 800 GxP Software

Description	Product code
Amersham IQ 800 GxP E- License	29653452
Amersham IQ 800 Software set	29653453

ImageQuant TL Analysis Software

Description	Product code
IQTL 10 Node locked license	29655283
IQTL 10 MAC OS Node locked license	29656650
IQTL 10 Floating license	29655286
IQTL 10 GxP Node locked license	29655289
IQTL 10 GxP Floating license	29655291

Optional accessories

Description	Product code
Amersham IQ 800 NP Lens	29399489
Amersham IQ 800 Custom filter holder	29399495

Upgrade modules*

Description	Product code
IQ 800 UV module	29424275
IQ 800 OD module	29424276
IQ 800 RGB module	29424277
IQ 800 NIR module	29424278

* OD, RGB, and NIR modules are available only for ImageQuant 800 UV configuration or above. Service charges are additional. Please contact your sales representative for more details.

Extended warranty and service offerings

Description	Product code
Amersham IQ 800 24 Month Warranty (12 Month Ext.) No PM incl	29435661
Amersham IQ 800 36 Month Warranty (24 Month Ext.) No PM incl	29435663
Amersham IQ 800 60 Month Warranty (48 Month Ext.) No PM incl	29435665

IQ/OQ Offering

Description	Product code
IQ/OQ Amersham ImageQuant 800	29441929
IQ/OQ Amersham ImageQuant 800 UV	29441930
IQ/OQ Amersham ImageQuant 800 OD	29441931
IQ/OQ Amersham ImageQuant 800 Fluor	29441932
IQ/OQ Performance (1 Day)	28992654

Related products

Amersham ECL Reagents, markers and total protein stain

Description	Product code
Amersham ECL Prime Western blotting detection reagent 2 × 50 mL	RPN2232
Amersham ECL Prime Western blotting detection reagent 2 × 150 mL	RPN2236
Amersham ECL Prime Blocking Reagent 40 g	RPN418
Amersham ECL Select Western blotting reagent 2 × 50 mL	RPN2235
ECL Plex Western Blotting Combination Pack (Cy3, Cy5, Amersham Protran Premium 0.45)	RPN998
Amersham ECL Rainbow marker Full range	RPN800E
Amersham ECL Plex Fluorescent Rainbow markers 500 µL	RPN851E
Amersham Quickstain Kit	RPN4000

Amersham IR dyes

Description	Product code
Amersham CyDye 700 goat-anti-mouse (0.1 mg)	29360784
Amersham CyDye 700 goat-anti-rabbit (0.1 mg)	29360786
Amersham CyDye 800 goat-anti-mouse (0.1 mg)	29360788
Amersham CyDye 800 goat-anti-rabbit (0.1 mg)	29360790

Amersham Western blotting membranes—nitrocellulose (NC) and PVDF

Description	Product code
Amersham Protran™ 0.45 NC 300 mm × 4 m	10600002
Amersham Protran 0.2 NC 300 mm × 4 m	10600001
Amersham Protran Premium 0.45 NC 300 mm × 4 m roll 1/PK	10600003
Amersham Protran Premium 0.2 NC 300 mm × 4 m roll 1/PK	10600004
Amersham Protran 82 mm 50/PK	10401116
Amersham Protran Premium Sandwich 0.45 µm NC + 3MM Chr Paper 80 mm × 90 mm 10+20/PK	10600117

Others

Description	Product code
Amersham HCP DIBE CHO	29402111

Western blotting consumables are available in other pack sizes and dimensions. Please contact for more information.

cytiva.com

For local office contact information, visit cytiva.com/contact

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