GE Healthcare
Life Sciences

Experience counts.

It takes vision to invent ECL imaging and continue to improve upon it. Introducing the Amersham Imager 680.

Experience counts. Experience leads to trust. Your lab counts on your experience to deliver meaningful results that can be trusted, and you can trust GE Healthcare and Fujifilm™ with all of your imaging needs.

Since the introduction of the first enhanced chemiluminescent (ECL) detection reagent, Amersham ECL in 1993, we have been improving and developing reagents and imagers that deliver sensitivity, speed and versatility.

From that experience comes the Amersham Imager 680, a sensitive, robust and easy–to–use CCD imager designed to provide publication-quality digital images of DNA and protein gels and blots.

Results you can trust. Images you can count on.

Amersham Imager 680

Sensitive. Easy. Reliable.

See more with increased sensitivity and improved resolution.

With the Amersham Imager 680, users can detect small changes in protein levels and low abundance proteins with confidence.

- Obtain high sensitivity with the Super-honeycomb CCD chip that has larger than usual pixels in hexagonal shape to capture more light, along with a special F/0.85 43 mm FUJINION™ lens developed specifically for low light applications such as chemiluminescence
- Achieve sharper images and improved resolution of closely spaced bands with a special 'no binning' high resolution mode

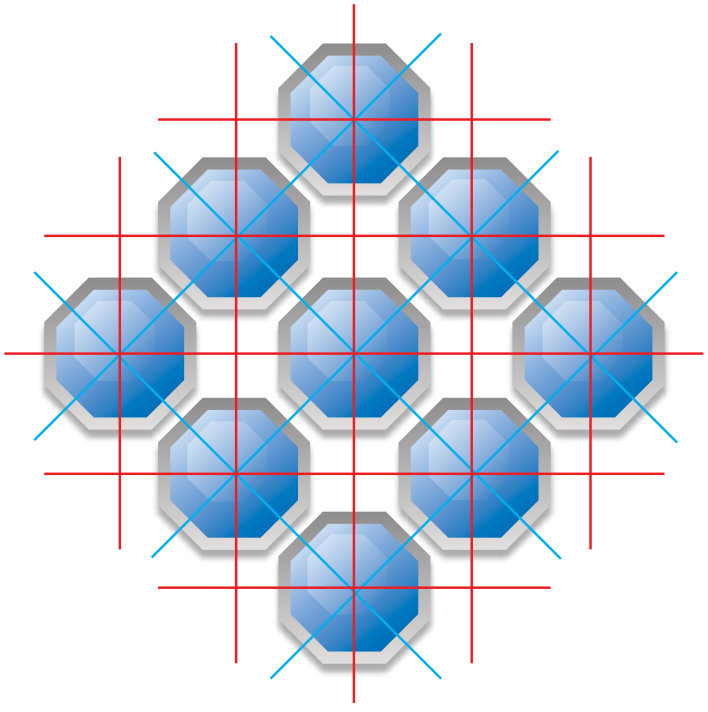

Fig 1. The special octagonal interwoven pixel layout offers a dense matrix for a more efficient capture of light compared to a standard, square-pixel layout.

Do more with added flexibility

The Amersham Imager 680 further enhances performance by providing flexible software features and four different chemiluminescent imaging modes (Auto, Semi-Auto, Incremental, and Advanced) that enable users to:

- Determine molecular weights quickly with real color imaging of color markers with automatic overlay of chemiluminescence blots
- Easily program advanced experiments like Southern blotting with increased exposure times (up to 10 h) and increments (up to 50)
- Save time by assessing images in real time with the advanced contrast tool during increment imaging
- Effortlessly change and adapt to different binning levels based on the needs of your experiment

Sample:	*E. coli* lysate
Membrane:	Amersham Hybond™ ECL
Blocking:	3% BSA in PBS-T
Marker:	Full range ECL Plex™ Fluorescent Rainbow™ Marker
Primary antibody:	Rabbit anti DHFR C-terminal 1:1000
Secondary antibody:	ECL Anti-rabbit IgG horseradish peroxidase 1:100 000
Detection:	Amersham ECL Select
Imaging method:	Chemiluminescence with colorimetric marker
Binning:	Default

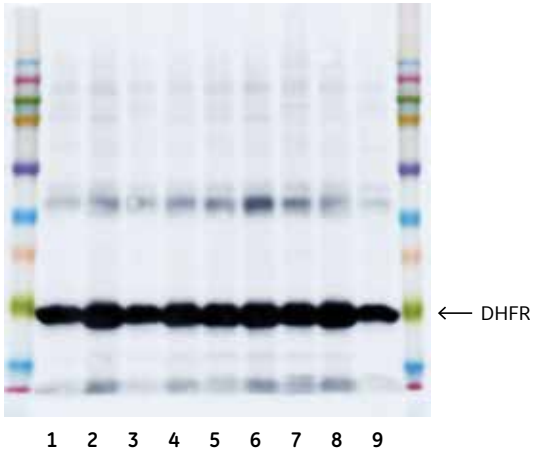

Fig 2. The chemiluminescence mode allows simultaneous imaging of chemiluminescent samples and colored molecular weight markers. This image was taken from experiments for optimizing the expression of the protein DHFR in *E. coli* grown under different conditions.

Image and analyze now easier than ever before

Complex evaluation is now a simple task using intuitive software on the Amersham Imager 680 series that effortlessly guides the user from imaging to analysis.

- Easily access and share files through network connection or USB transfer
- Immediately capture and analyze images with readily available onboard analysis software—detect bands, lanes, calculate molecular weight, normalize, and quantify your bands with ease
- Stand-alone analysis software is also included for users who prefer to perform analysis on a different computer

Feel confident with reliable results and enhanced security

The Amersham Imager 680 is also equipped with features for use in QC environments. Industry users can:

- Quickly and reliably perform calibrated OD measurements of Coomassie or silver stained gels with Amersham imager QC model
- Enhance security with password protection
- Validate the system with the trusted IQ/OQ validation package

Sample:	Two fold dilution series of LMW marker
Post staining:	Coomassie Brilliant Blue
Imaging method:	Colorimetric white transillumination
Limit of detection:	16 ng of carbonic anhydrase
Dynamic range:	1.8 orders of magnitude

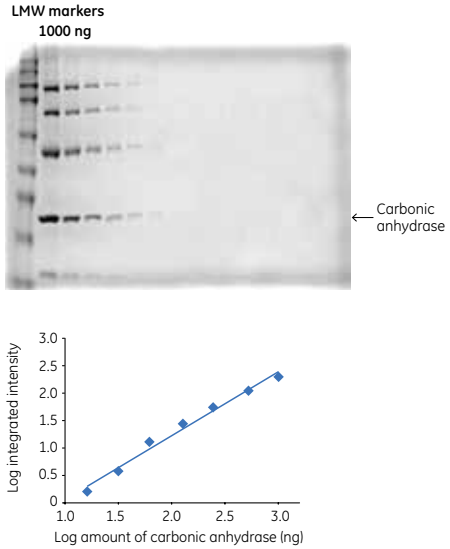

Fig 3. Image of a two-fold dilution series of LMW-SDS Marker in a gel stained with Coomassie Brilliant Blue. The image was recorded on Amersham Imager 680 in trans-illumination mode, which allows you to measure the optical density of protein bands without calibration.

To request a demo, please visit gelifesciences.com/AI680demo

For more information, please visit gelifesciences.com/AI680

Ordering information

Product	Code number
Amersham Imager 680	29270769
Amersham Imager 680UV	29270770
Amersham Imager 680QC	29270771
Amersham Imager 680RGB	29270772

Additional Software

ImageQuant TL 8.1, node locked license*	29000737
ImageQuant TL 8.1, 5 x 1 node locked license*	29000810

* External computer needed. Cannot be installed on Amersham Imager 680.

IQ/OQ Validation service

Description	Service type	Code number
IQOQ Amersham Imager	Documents Performance	29098345 28992654
Requalification	Documents Performance	28956204 28992654
CCP minor change	Documents Performance	28920512 28992654

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