

Any lab.

Any imaging need.

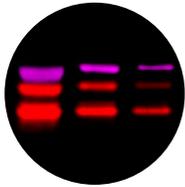
FluorChem systems
have you covered.

Trusted everywhere

FluorChem imaging systems are part of the original Alpha Innotech family of imagers, and are used in tens of thousands of labs worldwide. They're also cited in thousands of publications, putting them at the top of the heap when it comes to published brands! You can check out FluorChem system publications at proteinsimple.com/citations

All the applications you need

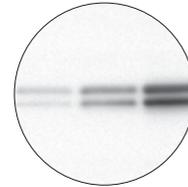
Whether you're doing chemiluminescent, fluorescent, colorimetric, multiplex gel and blot applications or mixing it up with a bit of everything — FluorChem systems have all your applications bases covered.



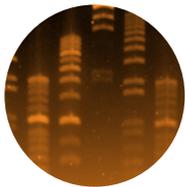
✓ IR Fluorescence



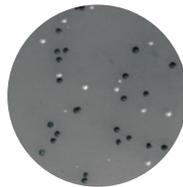
✓ Multicolor
Fluorescence



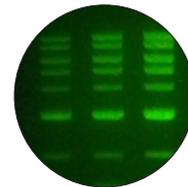
✓ Chemiluminescence



✓ UV Fluorescence



✓ Visible Imaging/
Colony Counting



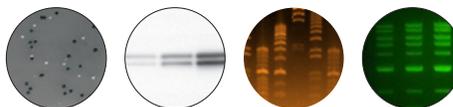
✓ Blue Excited
DNA Dyes

Systems that let you grow

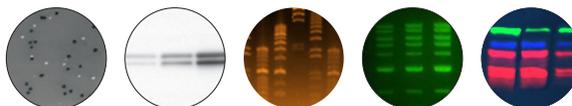
Science is always changing, and the work you're doing in the lab does too. We've got three FluorChem systems to choose from and you can add filters as you go. Pick the one that fits your budget and applications needs for the right now — you can always upgrade down the road when your needs change.



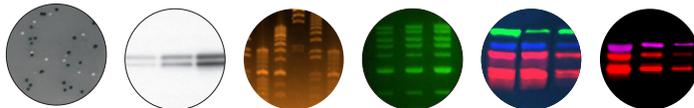
FluorChem E



FluorChem M



FluorChem R



Fine-tuned flexibility

FluorChem systems have up to 10 filter positions, which makes them compatible with a big range of dyes and kits. So you can keep your protocol as-is and use the kits you like best — you'll never be stuck using pricey, proprietary kits.

DYE/METHOD	LIGHT SOURCE	EMISSION FILTER	R	M	E
FLUORESCENT WESTERNS					
MultiFluor Blue	475 nm LED	537/26 nm	●	●	
MultiFluor Red	632 nm LED	710/40 nm	●	●	
MultiFluor Green	534 nm LED	607/36 nm	●	●	
DyLight 550	534 nm LED	607/36 nm	●	●	
IRDye 680/680LT	632 nm LED	710/40 nm	●	●	
Dylight800	747 nm LED	835/70 nm	●		
BLOTTING					
Chemiluminescence	None	None	●	●	●
NUCLEIC ACID STAINING					
Ethidium Bromide	Trans UV	Orange (FCM - 593/40 nm) (FCE - 590/50 nm)	●	●	●
SYBR® Safe	Trans UV 475 LED (FCM only)	Green (537/26 nm)	●	●	●
PROTEIN STAINING					
Coomassie Blue	Trans UV with White Conversion Screen	Orange (FCM - 593/40 nm) (FCE - 590/50 nm)	●	●	●

This is just a small sample of supported applications. See the full list at proteinsimple.com/FluorChem-EMR-dyes

Features that pack a punch

FluorChem systems come with a scientific grade, high-resolution, high-sensitivity CCD camera. They make detection of gels and blots super simple with fully automated optics and one-touch image capture. All in a compact, 12" x 24" footprint!

8.3 Megapixel Resolution

Cooled CCD with automated acquisition optics result in exceptional image quality

Multiple Detection Wavelengths

Motorized 10-position emission filter wheel for a wide range of imaging applications

White Light Imaging

Provides easy sample positioning and imaging of colorimetric blots and colony plates

Multiplex Fluorescent Imaging

Multicolor LEDs with 3 excitation channels optimized for quantitative Western blot imaging*

Touchscreen Operation

Acquire, review, save and print images using simple on-screen commands

Image Storage and Remote Access

Integrated computer and hard drive for automated image archiving and remote browser-based access

Networking and Printing

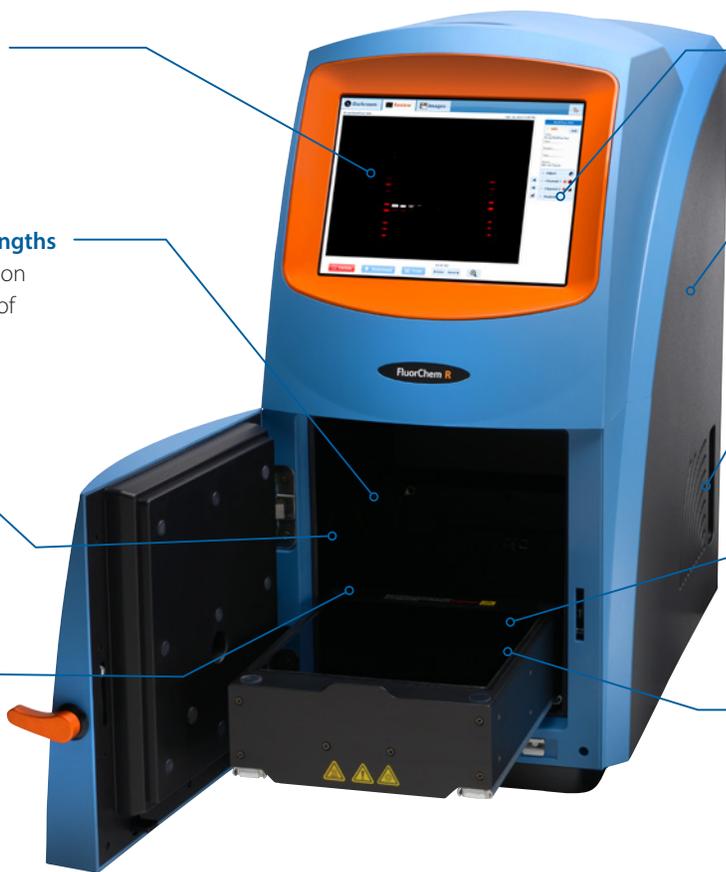
Network and USB ports for both image retrieval and printing

Infrared Imaging

Infrared excitation and detection reduces autofluorescence**

UV Imaging

Pull out UV transilluminator for easy loading and imaging of DNA and protein gels

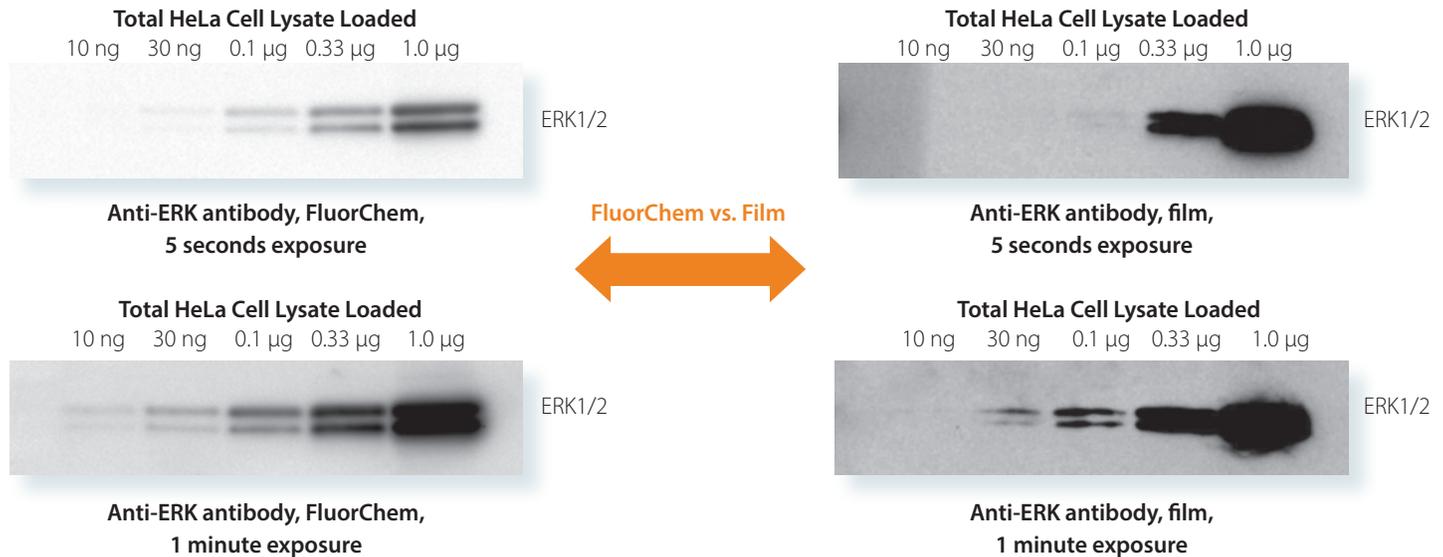


*Available on FluorChem M and FluorChem R systems.

** Available on the FluorChem R system

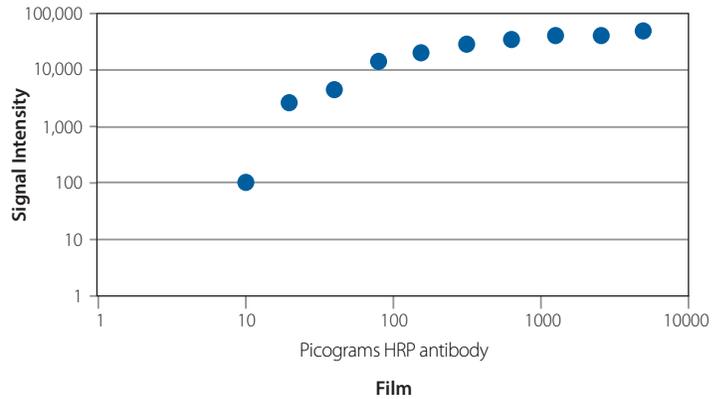
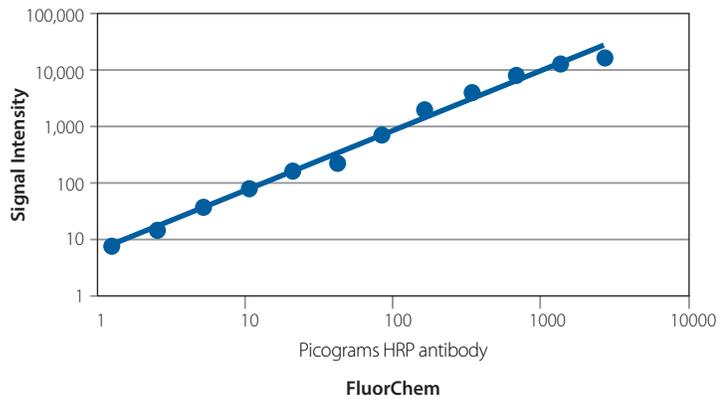
The right exposure every time

With imaging speeds that blow film away, you don't have to worry about under- or over-exposure of chemiluminescent Western blots. Load less protein, use smaller amounts of your precious antibodies and never miss a faint band again!



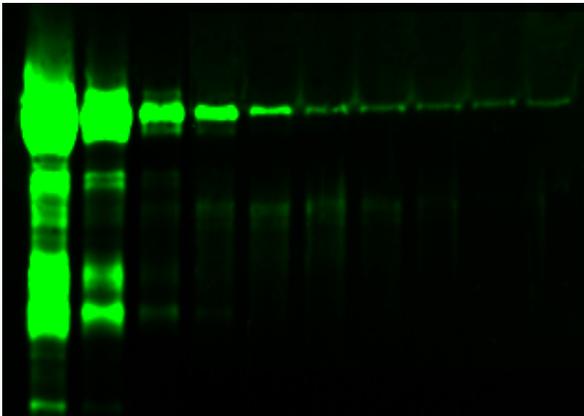
Step up your quantitation

With FluorChem systems, your dynamic range plots won't curve like they do with film. They'll take both your quantitation and your linear dynamic range up a few notches.

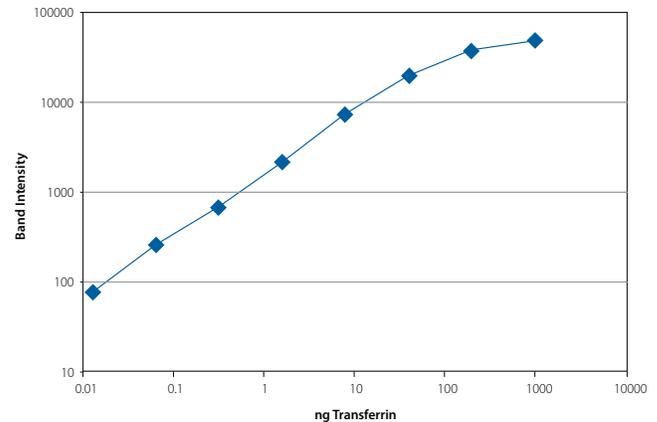


Up your range

FluorChem systems give you picogram-level sensitivity, a 3-log linear range and up to a 5-log dynamic range. Translation? You can detect a wide range of concentrations on the same blot.



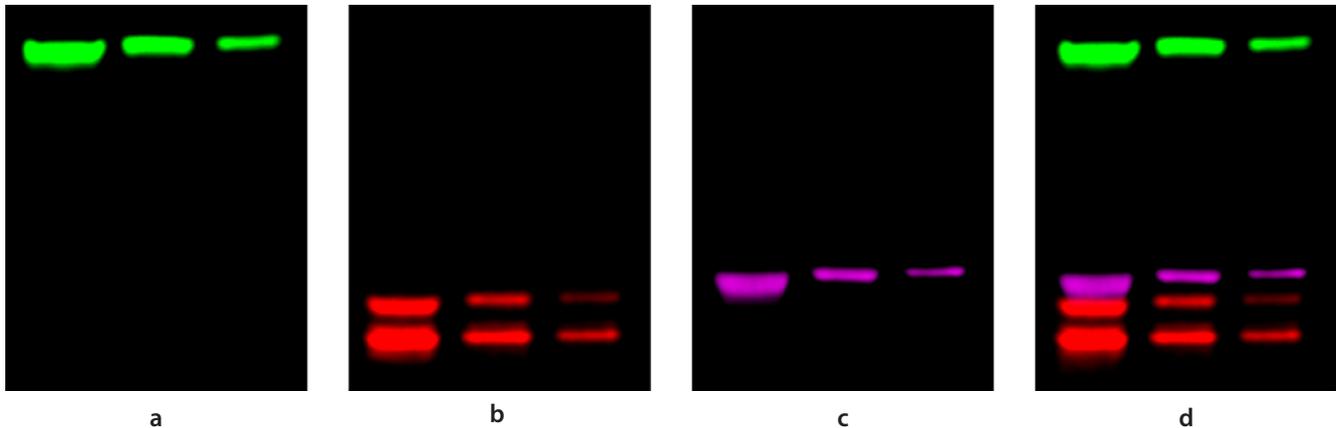
Serial dilutions of Transferrin from 1.0 μg to 0.5 pg were detected by Western blot using MultiFluor Green secondary antibody. The quantitative linear range was above 3 orders of magnitude with a 0.5 pg limit of detection.



Serial dilutions of Transferrin were detected by Western blot using MultiFluor Green secondary antibody. The dynamic range of detection was approximately 5 logs.

No-strip multiplexing

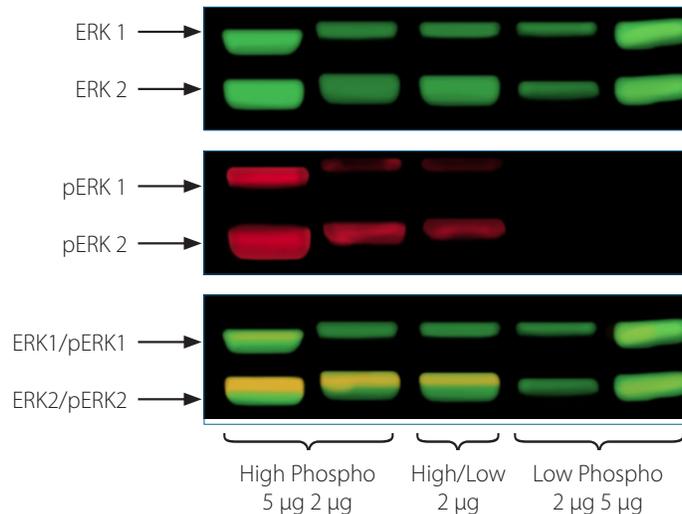
FluorChem M and R systems let you do 3-channel multiplexing in a single click and detect multiple proteins on the same blot. So you can skip the stripping and re-probing that comes with chemiluminescence, and save time and precious sample in the process.



Multiplex detection of HSP70 (a), ERK1/2 (b) and β -actin (c) in HeLa lysates with infrared (IR) fluorescence. Independent images for each fluorescent channel were obtained sequentially and a composite image (d) was generated by overlaying the individual images. All three colors were imaged in a single scan using Digital Darkroom acquisition software on the FluorChem R system.

Catch co-migrating proteins

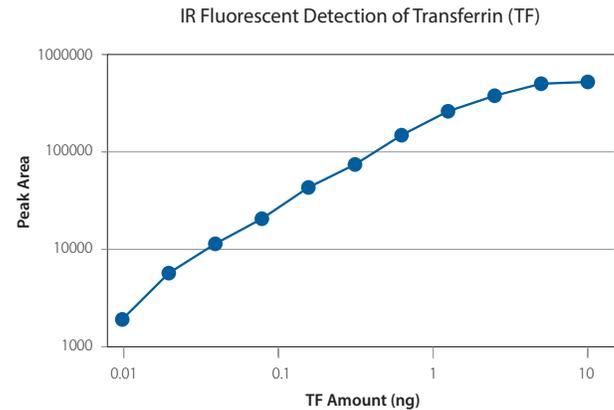
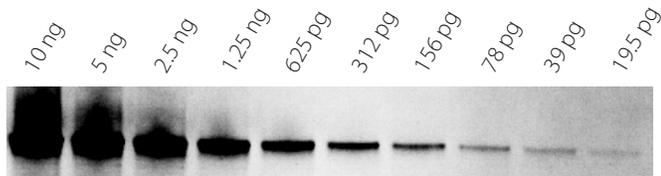
Multiplex Westerns also let you probe for overlapping proteins. That means you can detect all your phosphorylated and unphosphorylated isoforms in a single blot.



HeLa lysates with anti-ERK1/2 and anti-pERK1/2 primary antibodies followed by MultiFluor Green and MultiFluor Red secondary antibodies. (Top) ERK1/2 labeled with MultiFluor Green; green color shown. (Middle) pERK1/2 labeled with MultiFluor Red; red color shown. (Bottom) Overlaid image of ERK1/2 and pERK1/2.

See more with infrared

The FluorChem R system comes with infrared excitation and detection, letting you keep the sensitivity you get with film without the dynamic range trade-off. Added bonus? It reduces your background auto-fluorescence and you'll get 4-channel multiplexing to boot!



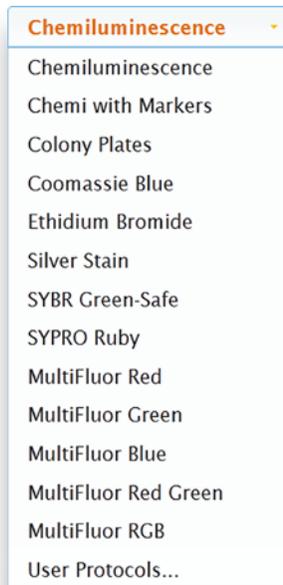
Infrared (IR) fluorescent detection of human transferrin (TF) in HeLa lysates. Two-fold serial dilutions of TF from 10 ng to 4.9 pg were loaded onto a blot and detected using IR fluorescent-tagged secondary antibody and imaged using the 835 nm IR channel (left). Results were linear from 9.5 pg to 5 ng (right) with a 9.5 pg LOD.

Simple imaging

Just load your blot, pick an application and hit expose! The FluorChem systems' integrated computer, 10.4" touch screen and Digital Darkroom software with automated image capture optimization makes taking great images a breeze.

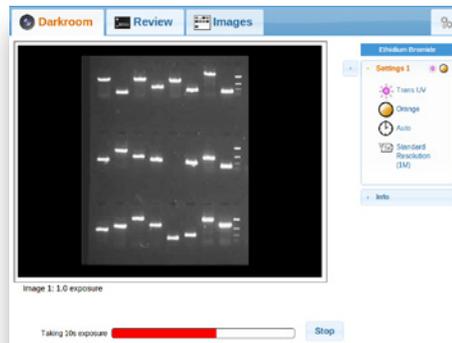
Step 1: Choose your application

Select from a list of optimized protocols or create your own.



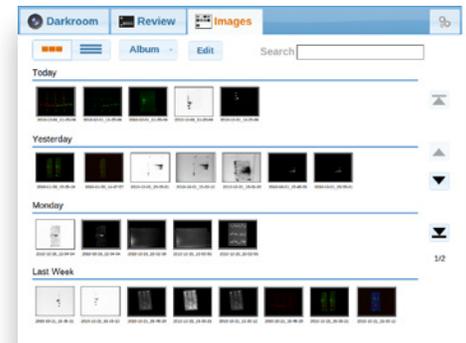
Step 2: Capture your image

One-touch acquisition includes instant post-capture image optimization.



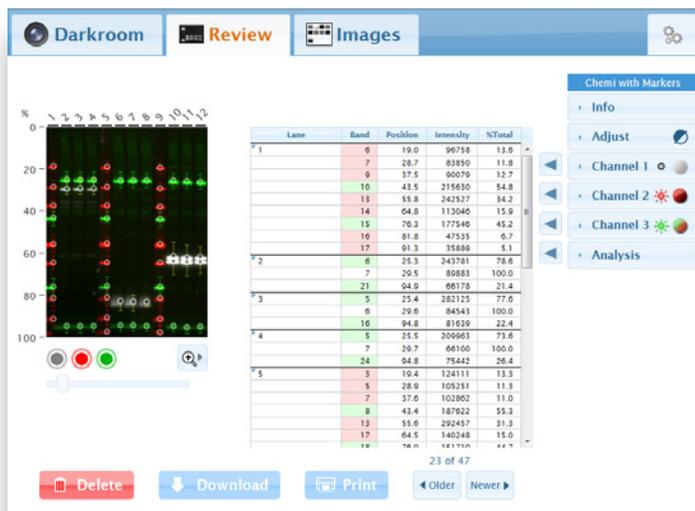
Step 3: Review your results

Images are automatically saved and can be printed, copied, or analyzed right away.

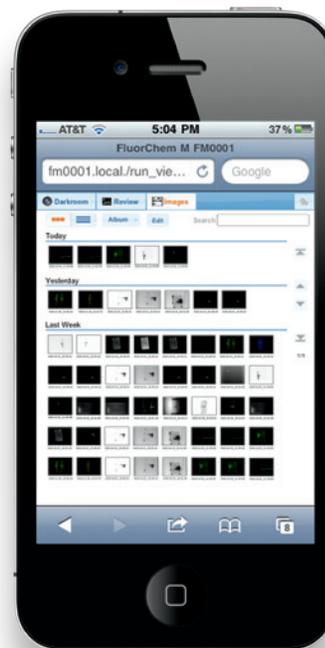


Access from anywhere

Digital Darkroom software lets you analyze images on the spot. You can even control FluorChem systems from your desk and access your images, plus there's no external software or licenses to maintain. On the go? Access the system from a mobile device or tablet too!



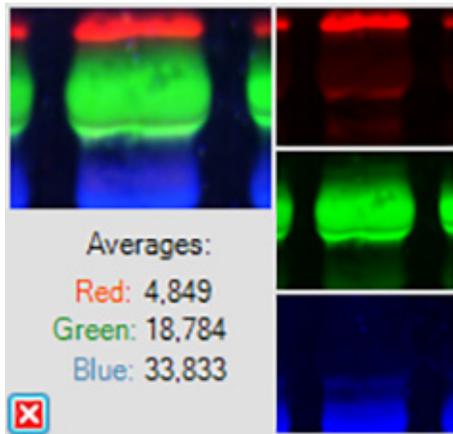
Find your bands and compare results across multiple detection channels automatically.



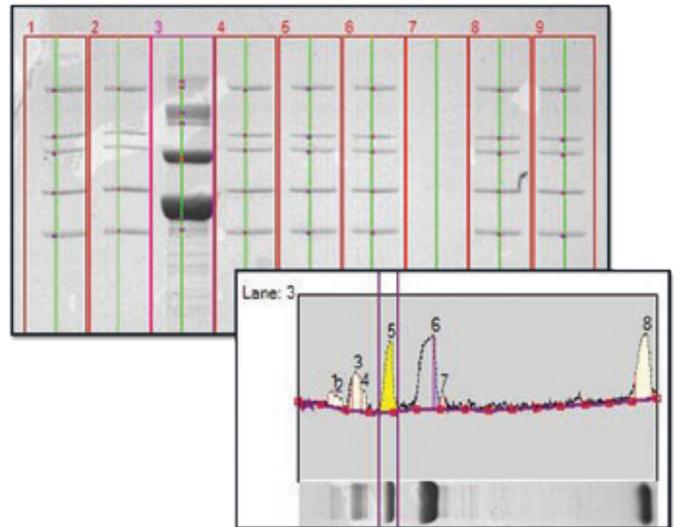
Use a web browser on your PC, Mac, tablet or smartphone to acquire, review and analyze your images.

All the analysis tools you need

When you want to dive deeper into your quantitative analysis, AlphaView Software lets you do just that. Application-driven acquisition, experiment-based analysis protocols, and a full set of annotation tools let you generate publication-ready results and images in no time.



Channel Viewer lets you view individual channels in a 3-color composite image to see overlapping bands and get the intensities of each channel.



Lane Profile Analysis does automatic and manual peak detection, corrects for gel smiling and distortion with a grid skewing feature, and lets you set minimal peak detection limits easily.

Which FluorChem system is right for you?

APPLICATIONS	FLUORCHEM R	FLUORCHEM M	FLUORCHEM E
Infrared fluorescence	●		
3-color fluorescence	●	●	
Chemiluminescence	●	●	●
Gel documentation	●	●	●

SPECIFICATIONS	FLUORCHEM R	FLUORCHEM M	FLUORCHEM E
Resolution	8.3 MP	8.3 MP	8.3 MP
Dynamic range	65,536 grayscale	65,536 grayscale	65,536 grayscale
Detector	-30 °C cooled CCD, 5-minute cooling time	-30 °C cooled CCD, 5-minute cooling time	-30 °C cooled CCD, 5-minute cooling time
Standard optics	50 mm f/1.4 motorized lens	50 mm f/1.4 motorized lens	50 mm f/1.4 motorized lens
Light sources	IR LEDs RGB LEDs 365/302 nm UV Epi & Trans White	RGB LEDs 365/302 nm UV Epi & Trans White	365/302 nm UV Epi & Trans White
Filter positions	10 – motorized	10 – motorized	6 – motorized
Excitation wavelengths	747, 632, 534 and 475 nm	632, 534 and 475 nm	—
Emission wavelengths	835, 710, 607, 593 and 537 nm	710, 607, 593 and 537 nm	590 nm
Storage	480 GB	480 GB	480 GB
Filed of view	16 x 12 cm	16 x 12 cm	16 x 12 cm
Weight	34 kg	34 kg	34 kg
Dimensions (W x D x H)	32 cm x 62 cm x 62 cm	32 cm x 62 cm x 62 cm	32 cm x 62 cm x 62 cm



Toll-free: (888) 607-9692
 Tel: (408) 510-5500
 Fax: (408) 510-5599
 info@proteinsimple.com
 proteinsimple.com

© 2017 ProteinSimple, the ProteinSimple logo, FluorChem, Alphamager, Alpha View and Digital Darkroom are trademarks and/or registered trademarks of ProteinSimple.

94-1000-00 Rev F