

SPRImager®II Array System

Summary

GWC's SPRImager®II is designed for analysis of molecular interactions in an array format. The entire array is exposed to the same analyte in the 1-cm flow cell, eliminating the channel-to-channel variability inherent in multichannel systems, and allowing for simultaneous capture of data for all probes on the array.

Label-free

The SPRImager®II uses Surface Plasmon Resonance imaging (SPRi) to detect molecules as they bind to probes on the surface of the array. SPRi works without the use of labels such as fluorescent tags. Since labelling molecules involves modifying them chemically, there is a risk that the function may be impacted by the label, a particular problem for proteomics research. Therefore label-free systems such as the SPRImager®II are the preferred approach for functional analysis of protein interactions.

The SPRImager®II also lets you view the array images as you collect them, and plots the progress of interactions at the same time. This greatly accelerates methods development, letting you keep an eye on experimental progress throughout the assay period. There is no need to worry about quenching of fluorescent labels when there aren't any.



Versatile

If you have multiple research interests, or should your experimental needs change, you will appreciate the broad capabilities of the SPRImager®II. Since SPRi can detect molecules regardless of chemical composition, this system is as versatile as your imagination: from antibodies to antibiotics, cells to cytokines, ligands to lectins, oligonucleotides to oligosaccharides, toxins to transcription factors, proteins to peptides, and all the way from aptamers to zymogens, the SPRImager®II can handle your future needs as well as your current ones.

And don't forget there's more to proteomics than pairwise interactions. With the SPRImager®II you can monitor multiple sequential binding events, and analyze activities such as ligand-dependent binding and competitive binding. The publications list provides examples of the diversity of successful research projects completed with this system.

Flexible

The user-friendly SPRImager®II system puts you in the driver's seat, letting you select the best experimental design for your particular project. You can choose any of [GWC's application methods](#), select one from the growing body of [literature](#), or develop your own protocols. And customers can always contact a knowledgeable [GWC Technologies representative](#) for advice.

For SPR imaging, you can make arrays on the [SPRchip™](#) or [SpotReady™](#) chip substrates, using either a spotting robot or, for SpotReady™, simple manual pipetting with the equipment you already own. And all of GWC's array substrates are manufactured dextran-free, so you don't have to worry about entangled polymers impeding access of target molecules to the probes on your arrays.

Affordable

All SPRImager®II systems include the pump, flow cell, computer and software, ready for immediate use. You can have this system up and running in your lab for less than you might expect, and you don't need to invest major resources learning to use the system. A short introduction during installation is all you need to get started with your experiments.



SPRImager®II Key Features

- **Imaging capability** for simultaneous capture of data across the entire imaged area. High-sensitivity near-IR CCD camera with high throughput collection lens delivers high quality image data.
- **Real-time data**—images and graphical data may be displayed in real time and saved for later scrutiny.
- **Analyte delivery pump** included with every system. Collect data under continuous flow or stop-flow conditions.
- **Polarization control** for collection of s-polarized light responses. Enables conversion to absolute reflectivity values for direct comparison between experiments. No need to settle for arbitrary relative units of measure.
- **Adjustable incident light angle range from 40° to 70°** allows for maximum flexibility in measuring a wide variety of surface types. Enables collection of SPR measurements in liquid and in air.
- **Operating wavelength at 800nm** provides optimum balance of sensitivity and lateral resolution for SPR measurements across the ~1-cm diameter circular flow cell. Custom wavelengths are available, please contact [Technical Support](#).

For complete details of the SPRImager®II system, including prices and specifications, please contact your [GWC Technologies representative](#).

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