

Arrays in. Data out.

ProteinArray™ Workstation



Automated Protein Array
Processing System for
High Content Proteomics



Walk away automation for

More throughput and better data me

How would you like to process more protein arrays in the same or less time? Use less sample? Generate more data, faster, and spend more of your time on downstream applications? You can, with PerkinElmer's ProteinArray Workstation, the only dedicated system for protein array processing.

Improve processing

The ProteinArray™ Workstation is a flexible, fully automated protein array processing system that lets you get more from your protein arrays.

How? The ProteinArray Workstation automates *every* aspect of your array processing. Assay conditions, such as time, temperature, and reagent volumes and additions, are all automatically controlled by the ProteinArray Workstation, ensuring **minimal use of sample** and **consistent processing** of every array. And multiple protein arrays are processed in parallel, ensuring **accurate, reproducible, and meaningful analyses**.

You just set the system up and walk away. It all adds up to a big reduction in your hands-on time, a big increase in throughput, and **more and better data** from your protein arrays. Every array. Every assay.



High Performance Solutions for High Content Proteomics™

Protein arrays provide highly parallel, miniaturized detection of protein expression levels, interactions and functions in complex solutions. The **ProteinArray Workstation** is an integral component of PerkinElmer's total solution for microarray-based proteomics.

Protein arrays are printed on the high-precision Piezorray™ Non-Contact Microarraying System onto a 3D microarray substrate using **HydroGel™** glass slides. Assays are developed and optimized on the ProteinArray Workstation. Multiple arrays are processed on the **ProteinArray Workstation** and scanned with the industry-standard **ScanArray® Express** family of microarray scanners for rapid image acquisition and analysis. This approach requires minimum use of materials and samples while generating large amounts of valuable data.

We think our approach to proteomics is unique. Our goal is to maximize your ability to separate, image, extract and analyze the highest amount of relevant protein data from available samples. We are achieving this by creating solutions that enable you to integrate the diverse techniques needed to understand complex biological systems and by streamlining the process of generating relevant results. We call this concept **High Content Proteomics**.

Reduce hands-

protein array processing.

ensures more discovery!

The ProteinArray Workstation features...

- **Fully automated microarray processing** reduces hands-on time.
- **Multiple, parallel processing** ensures high assay reproducibility array-to-array and provides increased throughput.
- **Automated low volume injection of two samples per array** conserves precious samples.
- **On-Line reaction agitation** ensures thorough mixing and a homogeneous assay solution throughout assay incubation.
- **Programmable temperature control** provides flexibility in optimizing and controlling temperature-sensitive protein assays.
- **Programmable reagent and sample addition** provides flexible assay design and fast method development.
- **TSA™ module** provides easy integration of Tyramide Signal Amplification technology into your assay design.
- **Software processing control** provides user-friendly intuitive software interface that enables programmatic methods development, monitors assay progress, validates assay parameters in process, and ensures failsafe unattended operation.

It all adds up to **more** throughput, **more** data and **more** discoveries.

Key Applications

- Protein expression analysis
- Protein-protein interaction studies
- Antibody profiling
- High throughput multiple protein analysis
- Target identification and validation



Intuitive, simple and easy-to-use software helps you take control — fast!



ProteinArray Workstation's built-in software is designed for simple navigation and use. Methods for each assay can be created, edited and stored. Drag and drop features make it easy to learn and use. Key features include:

Protocols

- Includes Gold Protocols for quick-start assay method development.
- Original user-defined protocol library storage.
- Definable protocol properties for controlling conditions for the entire assay.
- User friendly protocol creation with drag and drop instructions.
- Protocol validation to ensure proper reagent placement and compositions before executing assay.

Software Interface

- Multiple user log on with password protection.
- Definable reagent library.
- Multiple processor control for dispatching runs in parallel.
- Load software onto multiple remote computers and create protocols offline for later import.
- Real-time on-screen progress monitoring of assay protocol steps and temperature control module.

Assay Control

- Instructions which define individual steps within an assay.
- User-defined flow rated between 60 and 2,400 $\mu\text{L}/\text{min}$.
- Temperature control of the slide processor and TSA module drawer.
- Incubation of the sample/detector for a user-defined duration with the option to agitate at variable periods.

Start Getting More from your Protein Arrays Now

Automate your protein array processing and get more from your protein arrays. Contact us or your local sales representative for more information about the ProteinArray Workstation or any of PerkinElmer's offerings for proteomics research. Or visit our website at www.perkinelmer.com/proteomics.

How to Order

To order the ProteinArray Workstation, or for more information, contact PerkinElmer Life and Analytical Sciences at (800) 762-4000 in the U.S. or +32 2 717 7911 in Europe.

Get more data

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