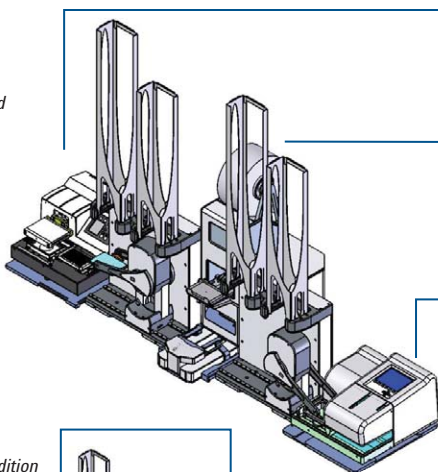


Agilent Automation Application Highlight

BenchCel Workstations for ELISA

Coating and
Blocking



Biotek Elx405 Plate Washer

Removal of unbound capture antibody or excess blocking reagent

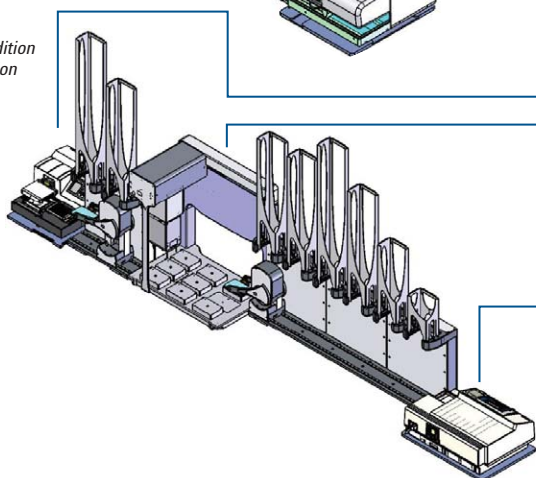
Agilent Microplate Sealer and Centrifuge

Spin down and seal batches of plates for the next step of the process

Perkin Elmer Flexdrop Dispenser

Bulk-dispense coating and blocking reagents to batches of microplates

Sample Addition
and Detection



Biotek Elx405 Plate Washer

Removal of unbound capture antibody or excess blocking reagent

Agilent Bravo Automated Liquid Handling Platform

Addition of samples and detection antibodies to assay plates

MDS SpectraMax V Plate Reader

Assay plate detection and analysis

A Benchtop Solution:

The use of ELISA is common for the quantitative analysis of nucleotides, peptides, proteins, and other biochemical molecules. Most ELISA methods require a similar workflow of coating, blocking, sample addition, antibody addition, and detection with multiple wash steps throughout.

Agilent integrates the BenchCel Microplate Handler, Bravo Automated Liquid Handling Platform, PlateLoc Thermal Microplate Sealer, and Microplate Centrifuge with third-party devices for plate washing, bulk dispensing, and detection to create a comprehensive and flexible benchtop solution for most ELISA methods.

Agilent Automation Benefits:

- **Plate Handling:** Use most 1536-, 384-, and 96-well microplates, tube racks, and lids.
- **Flexibility:** Devices can be added or replaced to customize this solution.
- **Scalability:** Additional stacks or BenchCel Workstations can increase capacity and throughput as needed.
- **Intelligent:** Agilent VWorks Automation Control software schedules protocol tasks, incubation steps, and reagent order-of-addition for maximum throughput and walk-away time.




Agilent Technologies

Basic ELISA Overview:

Coat with
Capture
Antibody




Wash Away
Unbound
Material



Block
Uncoated
Binding Sites




Wash Away
Unbound
Material



Add Sample



Wash Away
Unbound
Material



Add Detection
Antibody



Analyze
Sample



Example method for ELISA on the BenchCel Workstation. Steps can be modified as necessary. Estimated throughput is 50 sample plates per day, but can change with adjustments to protocol steps and liquid handling parameters.

Configuration Options

The Agilent BenchCel Workstations offer the flexibility of adding and reconfiguring options to meet your workflow requirements.

- **Incubation:** For cell-based ELISA, a microplate incubator can be integrated with workstation above.
- **Capacity:** Replace the 2-stack BenchCel Microplate Handlers with 4- or 6-stack models for additional capacity.
- **More:** Speak with one of our product specialists or application specialists to determine what configuration will work best for you.

Additional Services

All BenchCel Workstations include installation and product familiarization along with options to purchase additional services to meet your specific needs.

These options include:

- **Consulting:** Work with a team of experts to determine the best solution for your laboratory.
- **Application Development:** Let our application specialists develop and test system protocols for your applications.
- **More:** Speak with one of our product specialists regarding any additional support you require to ensure our solution meets all of your needs.

www.agilent.com/lifesciences/automation

Agilent Technologies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Information, descriptions, and specifications in this publication are subject to change without notice.

© Agilent Technologies, Inc. 2009
Published in the USA
October 22, 2009
5990-4491EN



Agilent Technologies